HUB-IN

**Towards Sustainable Innovation
in the centre of**

Nicosia

- a tale of two projects -

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Contents

1. Introduction

1.1 Nicosia, capital of Cyprus

Nicosia - also known as Lefkosia in Greek and Lefkoşa in Turkish - is the largest city and capital of Cyprus, located approximately at the geographic centre of the island having a strategic position in the eastern Mediterranean region. The metropolitan area of Nicosia Region gathers 220,000 inhabitants. Nicosia is a medium size city and the central municipality has a population of 55,014 citizens (based on the 2011 Census data) which is expected to increase considerably by 2025. The historic centre is surrounded by a formidable medieval fortification and it is home to approximately 9,200 inhabitants. The Nicosia district covers an area of about 111km^2, whereas its historic centre - within the venetian walls - extends to about 2km^2.

Nicosia is a dynamic city as it is the administrative, commercial and financial centre of the island. Nicosia is the main international business centre of Cyprus as well as the major employment centre (34% of jobs in greater Nicosia and 20% of jobs in the central municipality).

Nicosia is also a university city, concentrating nine major academic and research institutions and gathering approximately 30,000 students. At the same time, it is a city of culture with 37 museums, 18 theatres, 29 libraries and 19 cultural centres, numerous galleries, and artistic companies (dance, music, theatre, visual arts etc.). The capital hosts frequent cultural events, exhibitions and festivals and serves alternative forms of tourism (i.e. food tourism, architectural tourism, 'dark' tourism).

The turbulent history of the island and its division in 1974 makes the interaction between the two separated communities living on the island complex, challenging and pressing. The Greek Cypriot community lives in the South and the Turkish Cypriot community lives in the North of the island. The Buffer Zone that separates the two communities - also called the "Green Line"- extends approximately 180km across Cyprus . The Green Line also passes through Nicosia, violently cutting the city in two halves. In some parts of Nicosia it is only a few meters wide (such as in the Historic Area), while in other areas it is a few kilometres wide. Since 1974, Nicosia remains the last divided capital of the world, affecting the daily life of its citizens.

1.2 The Historic Urban Area (HUA) of Nicosia

A cultural mosaic: The complex identity of Nicosia and its rich history is reflected in the multiple tangible and intangible layers of the historic urban area. Encompassed by the venetian walls, and despite the city's division, the historic centre is a cultural mosaic where East meets West.

Nicosia Historic Centre

Nicosia Municipality boundaries
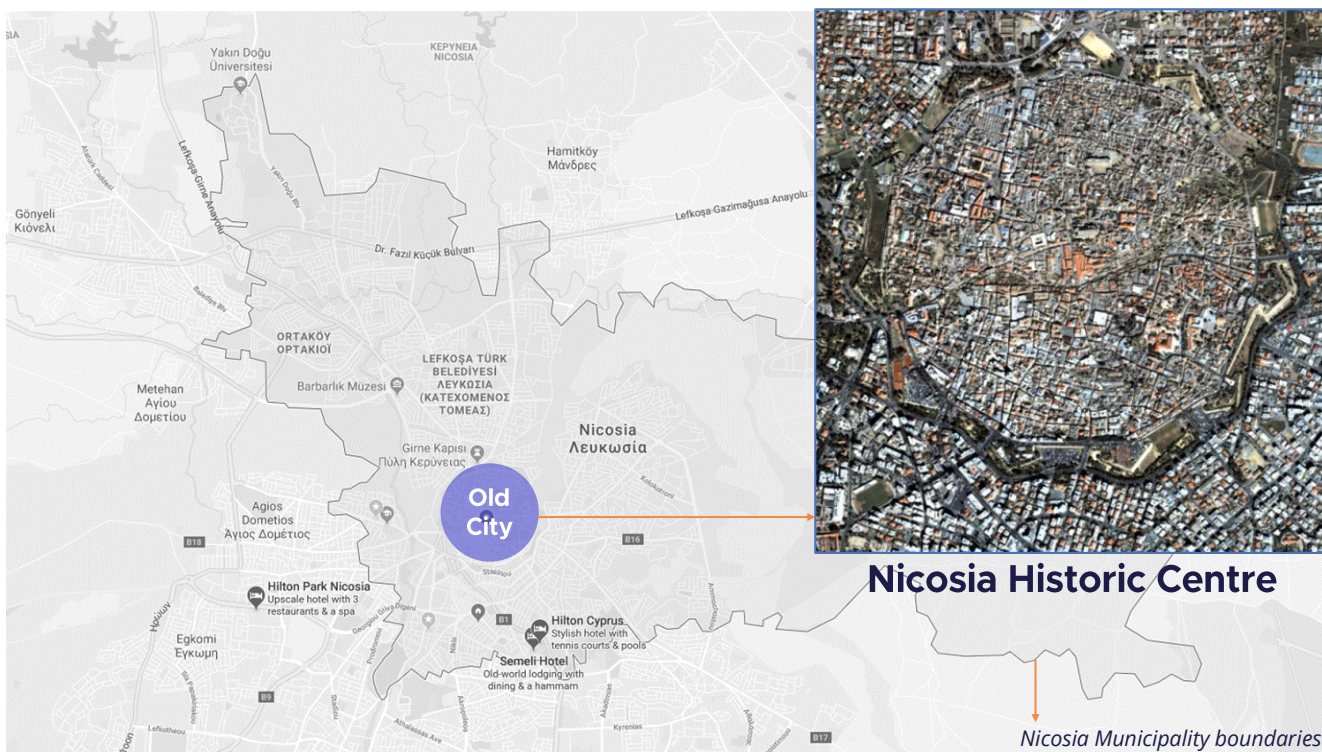
Municipal Boundaries of Nicosia and Location of the old walled city area. Map: Google Maps

Every neighbourhood in the fortified centre has a different atmosphere; contrasting images and feelings can be experienced through a brief walk or a cycle ride. It feels like entering a time machine at multiple times and moments. Residential and commercial streets, historic squares with monuments and elements of heritage. There is a striking transition between well preserved areas with renovated buildings of unique architectural character and liminal areas near the Buffer Zone with neglected and dilapidated constructions.

The buildings of different styles and landmarks of cultural heritage together with the diversity of groups make Nicosia the most cosmopolitan place on the island. However, the historic centre is mostly populated by elderly inhabitants and there is a low percentage of young families.

Nicosia Municipality is one of the active *Covenant of Mayors* signatories in Cyprus, with an ambitious ongoing and well performing Sustainable Energy Action Plan [SEAP] for 2020 and beyond, which also includes actions for the historic city. Based on the SEAP, the largest consumer of energy in the municipality is the transport sector followed by the building sector.

A vulnerable urban fabric: Starting from the fact that the historic centre is affected by the socio-spatial segregation, due to the surrounded fortifications, it becomes evident that the historic centre cannot expand in terms of land area to accommodate new facilities.

Overall, Nicosia experiences long, hot and dry summers with almost zero precipitation, whereas heat-waves are becoming more frequent each year. Additionally, the risk for urban flooding during sudden storms is constantly increasing.

Therefore, the historic centre is characterised by insufficient public and private transportation systems and obsolete infrastructures which lead to the excessive use of cars, even in the narrow streets of the historic centre, downgrading the quality of life of the residents and the experience of the visitors. There are also limitations for energy-related sustainable urban regeneration actions, as its biggest part is under preservation constraint, restricting many possible interventions.

Moreover, the historic centre is characterised by the lack of climate resilient public spaces and sustainable, inclusive buildings, whereas the heat-island effect and its consequences, are becoming more obvious every year, making it imperative to take drastic measures.

Buffer Zone "Green Line"

Nicosia - in numbers...

🔶 Metropolitan area of Nicosia Region:

≈ 220 000 citizens

🔶 Municipality of Nicosia:

≈ 55 014 citizens

≈ 22 833 households

111 km^2

🔶 Historic Centre (within the walls):

≈ 9 200 citizens

2 km^2

≈ 5 100 residents

≈ 4 100 residents
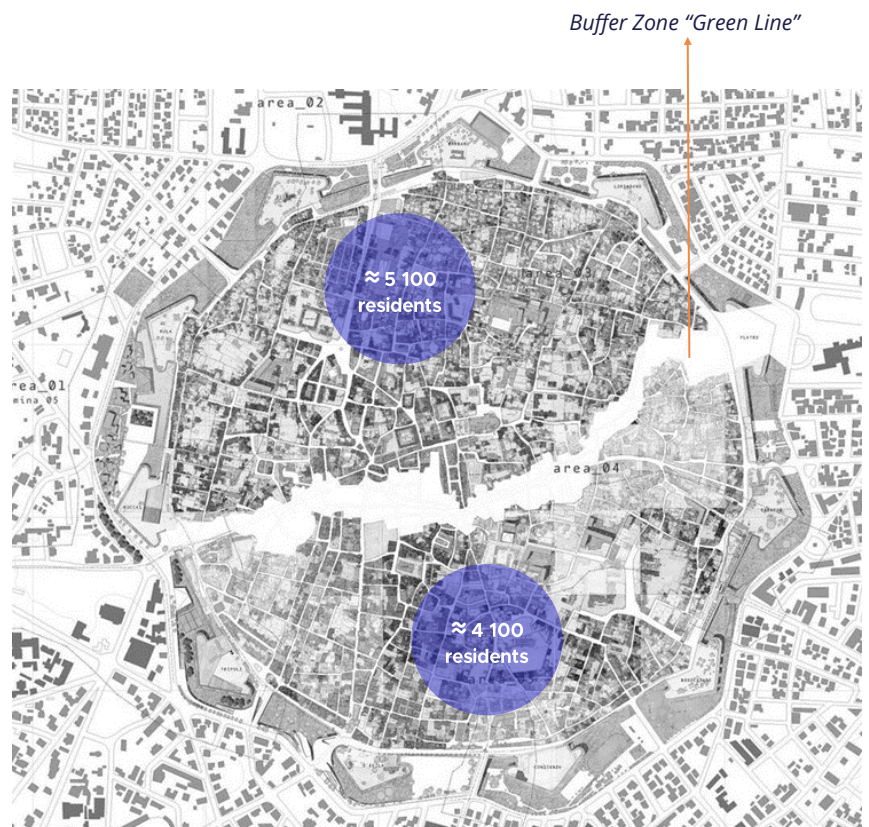
Important numbers for the city and Population Data within the walled city of Nicosia, based on 2011 Census. Map: https://bit.ly/2LL9pO4

Main challenges, strengths and strategies related to the HUA of Nicosia:

Key challenges

- Political constraints

- Difficulty in attracting funding & investment

- Difficulty in prioritising actions and target areas

- Climate change and lack of climate resilient spaces

- Lack of stakeholder engagement and citizens' participation

Key strengths

- Rich history and cultural-architectural heritage

- An area of "human scale"

- Ideal landscape for active mobility

- Citizens initiatives and bicommunal actions at the local scale

- CYENS, a centre of excellence

Existing Strategies

- Nicosia Master Plan (1979-)

- Smart City Strategy

- Nicosia Integrated Spatial Development Strategy

- Sustainable Urban Mobility Plan (to be developed)

You can read more about the Historic Urban Area of Nicosia in the Current Landscapes report by following the link below:

https://hubin-project.eu/library/hub-in-current-landscapes-report/

Top 5 things to know about Nicosia today

- Since 1974, Nicosia remains the last divided capital city in Europe. Nonetheless, the Municipality of Nicosia has always been convinced that it is essential to maintain the conditions for dealing with the divided Area as one entity.

- Nicosia is a complex mix of developed and neglected areas. Schemes to strengthen the city start from the principle that all parts of the city contribute to growth and innovation, and all parts should benefit regardless of the Buffer Zone.

- The fortified centre of Nicosia faces a lot of challenges, including: political constraints, insufficient infrastructure and limited climate resilient public space.

- The city has developed a Sustainable Urban Development Strategy, which has strengthened its research and innovation, technology and SME sectors as well as creative entrepreneurship. The Strategy, which includes six municipalities of the Nicosia Region, focuses on the regeneration of the city centre, areas along the Buffer Zone, the rehabilitation of the Pedieos River, the Commercial Triangle and the Creative Quarter.

- Projects funded by the EU focus on the regeneration of the city centre, the creation of green spaces in the Buffer Zone and the preservation of the local ecosystem. These form part of Nicosia's wider plans to attract investment and tourism, which has been difficult because of the political difficulties.

- The CYENS project, which began in 2017, aims to invigorate R&I in the city, enhance collaboration between industry, academia and the creative sector, and find new avenues of innovative R&I in the historic centre of Nicosia.

" **The 21st century will determine the way we will tackle climate change and social inequality in cities.** The actions to be taken to reduce the impact of climate change and the vulnerability of cities, contribute to reducing social inequality, by creating opportunities for partnerships and local investment, among other. **"**

2. Towards Sustainable Innovation in the centre of Nicosia

2.1 Two projects focusing on the regeneration of Nicosia's HUA

The premises of the Cyprus Energy Agency are located in the heart of the historic centre of Nicosia allowing the organisation to have direct communication and interaction with local stakeholders. The CEA team of has **a vision for Nicosia's centre to be an inclusive, accessible, green and regenerated walled city.** This vision has motivated the organisation to participate in two projects focusing on the historic urban centre of Nicosia, one that promotes its sustainable transformation and another one that aims to boost innovation.

A tale of two projects: The present document combines the presentation of the work done by the organisation within the framework of the Sustainable Historic City Districts (SUSHI) project which was co-funded by the EIT Climate-KIC for the period 2018-2020, and the presentation of the ongoing work for the Hubs of Innovation and Entrepreneurship for the Transformation of Historic Urban Areas (HUB-IN) project, which is funded by the Horizon 2020 programme.

HUB-IN comes in succession of SUSHI, seeking to bring innovation in the process of sustainable development in order to enhance the well being of people through inclusive solutions.

2.2 Sustainable Innovation

Sustainable Development and Innovation & are the central objectives of the SUSHI and HUB-IN projects respectively. It is plausible to refer to the concept of Sustainable Innovation which can assist citizens in managing their lifestyles by enabling them to live happier lives in ways that support sustainable development.[1]

Sustainable Development of a city is achieved when urban development meets the needs of the present, without compromising the ability of future generations to meet their own needs.[2] Sustainable Development has economic, environmental and social (and cultural) dimensions.

Innovation at a city level enables the creation of new practices and leads to changes in the structures of organisations and in the actions of people.[1]

Thus, the concept of Sustainable Innovation can help us understand and solve complex and serious problems in a historic urban core like Nicosia's with a vulnerable urban fabric and socio-cultural complexity.

Global knowledge hubs and local innovation ecosystems drive sustainable innovations and successful examples emerge all over the world. Sustainable innovations appear in different levels of policy-making (and particularly at the local / city level), in governance models, in eco-business and socially engaged enterprises, in design, in peer-to-peer practices and in sustainable lifestyle changes.

Below are the three characteristics that define sustainable innovation[1]:

1. **Sustainable innovation contributes to sustainable well-being:** which is achieved through good quality of life (including happiness), a sustainable economy and balanced relationship with the nature.

2. **Sustainable innovation is systemic:** as it relates not only to technological change but also to societal and cultural contexts that allow a transition.

3. **Sustainable innovation is inclusive:** which implies that that it supports collective wisdom and new forms of democracy so that all individuals have the opportunity to use their potential to seek creative solutions to challenges they consider important .

By introducing "Sustainable Innovation" we aim to provide a new conceptual lens through which to view the work of SUSHI and HUB-IN projects, their interconnection, and their interdependence.
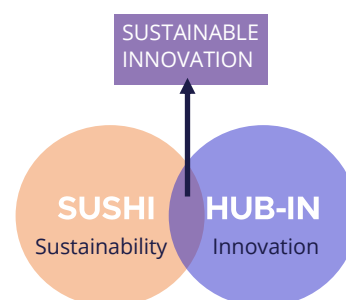
1. Oksanen, K., & Hautamäki, A. (2015). Sustainable Innovation: A Competitive Advantage for Innovation Ecosystems. Technology Innovation Management Review, 5 (10), 24-30. doi:10.22215/timreview/934
2. WCED. 1987. Our Common Future: Report of the World Commission on Environment and Development. Oxford: Oxford University Press

3. A Sustainable Historic Urban Area of Nicosia

3.1 "Sustainable Historic City Districts" Project [2018-2020]

The **Sustainable Historic City Districts (SUSHI)** project departed from a holistic approach to address common challenges already identified in the historic districts of five cities from four Mediterranean countries [Lisboa (PT), Savona (IT), Ptuj (SI), Sassari (IT) and **Nicosia (CY)**], and to work, within a shared framework, to change their historic districts towards more sustainable, climate resilient and inclusive ones, through innovative integrated solutions and social change.

The project, adopted a common framework to identify innovation opportunities to accelerate the learning process to transform the historic districts into sustainable and lively ones. Its key concept was to put sustainable development at the heart of the districts, by taking integrated approaches instead of responding to isolated challenges in a fragmented way.

The aim of the SUSHI project was to demonstrate how a collaborative approach to take integrated action, can deliver innovation towards sustainability and climate change mitigation and resilience. This process was tackled and developed through a participatory process with the districts' stakeholders and local population to assure its effectiveness in the long term.

Taking the five historic districts, the project delivered and tested innovative solutions across the areas of:

- mobility & accessibility
- local economic development & tourism
- housing & buildings
- circular systems & nature-based solutions

This was the result of coordinated actions across key-enablers of change:

- citizen & community participation
- stakeholder engagement
- governance & partnerships
- business models & finance platforms
- urban planning approaches
- communication & progress monitoring

The project enabled the participating city-district communities to take bolder steps to deliver local transformation through potentially replicable models, in a joint learning process. During the project's duration, the partners evolved from a Vision, to an Agenda, to a Plan, to change their

Entrance door of an urban house of Nicosia
© Nicosia Municipality Photo Archive

historic districts, by increasing the robustness of planning and delivery of transformative projects and supporting social systems.

3.2 How to sustainably transform Nicosia's HUA

Historic districts in Mediterranean cities have peculiar characteristics that make them unique for those who live there, but also for their visitors. They have many common features as, for example, historic urban fabric, composed by narrow streets with limited green public spaces, and degraded heritage buildings, often vacant. Due to their location, they also share common climate features, such as the very hot and dry summers and the relatively mild winters and increased heat waves, flash floods and water scarcity threats, which tend to be exacerbated under future climate changes.

All the abovementioned, are also evident in the Historic Urban Area of Nicosia, the 'city within the walls'. In order to support the HUA of Nicosia on its way to sustainable development, solutions must be provided in order to overcome the following challenges:

- lack of climate resilient public spaces, due to low presence of green infrastructure
- big percentage of derelict and empty buildings as well as underused plots which reduce the

attractiveness of the area for investing

- limitations to implement energy efficiency measures and utilise Renewable Energy Sources (RES) in the historic buildings due to their cultural value
- very congested streets with excessive use of private cars amplifying impacts on air pollution, noise and GHG emissions
- shrinking zones of mixed and commercial activities
- loss of the sense of community spirit, hampering its authenticity.

The existing Local Plan for the wider Urban Area of Nicosia city, offers a wider perspective for the development of the city, and does not focus on the complex and unique aspects that are particular and necessary for the revitalisation of the intra muros city. Therefore, in the framework of the SUSHI project, a new plan specifically for the revitalisation of the historic centre, was created by the team of the Cyprus Energy Agency based on citizens' needs. For the Action Plan for "An inclusive, accessible, green, regenerated city withing the walls", the community participation and the structured environment are put in the foreground. Through participatory workshops and stakeholder engagement sessions during the SUSHI project, five high-level objectives have been identified for the Historic Centre of Nicosia, which are presented in the text box below.

This 'Action Plan' aims to guide stakeholders on how to contribute to the revitalisation of the intra-muros city of Nicosia, emphasising on the intersection between small scale interventions, with the aim to enhance the built environment and the involvement of the local community in the process for sustainable development and climate adaptation & mitigation.

The following sections of Chapter 3 present the citizen's assessment for Nicosia's HUA quality of life (Section 3.3.), the transformative actions proposed by the Action Plan (Section 3.4) and the lessons that can be learned from other partner-cities of the SUSHI project (Section 3.5). In the Annexes you can find more information on the results of the project and the pilot implementations.

High-Level Objectives:

Environmental resilience and sustainability: Nicosia to become a city that facilitates non-motorised movement and has quality green public spaces with citizens who are aware of climate change mitigation and adaptation solutions (circular systems, nature-based solutions).

Governance and Participation: Nicosia to become a city where the local community participates effectively in the commons and has access to information on subjects that shape their everyday environment.

Accessibility and social inclusion: Nicosia to become a human-centred city where all community groups, and especially vulnerable groups, are considered in the establishment of physical and social infrastructures.

Quality of life: Nicosia to become an attractive, liveable and lovable city that offers opportunities to everybody to live up to their full potential.

Economic efficiency and prosperity: Nicosia to become a capital with a vibrant urban economy that promotes public-private partnerships, encourages the creation of innovative business models for its local economic development and attracts cultural tourism activities.

These are the core foundations to meet the Cyprus Energy Agency's vision for
"An inclusive, accessible, green, regenerated city within the walls".

Ambition of SUSHI project for the revitalisation of the *intra muros* city of Nicosia
- *small scale interventions with the aim to enhance the built environment*
- *involvement of the local community in the process for sustainable development and climate adaptation and mitigation*

3.3 Quality of Life

3.3.1 Assessing Citizen's Perceptions

The sustainable transformation of the Historic Urban Area of Nicosia requires an appropriate process that builds upon national and urban priorities and visions, as well as city strategies and programmes. It also needs to take advantage of the latest scientific findings and technological developments and to support the development of a visionary programme of research and innovation.

Creating a shared vision and strategy, means that opinions, concerns, ideas and recommendations of all stakeholders are taken into account through a co-creative process. This increases the acceptance and ownership of the strategic plan and the proposed concrete actions, and gives to the procedure a sense of bottom-up incorporation. The creation of a shared vision requires a variety of resources, tools and methodologies, such as surveys, meetings, focus groups, open dialogue with stakeholders, and development of online platforms to share thoughts and ideas.

A more holistic approach to the needs and expectations of the citizens is required in order to move forward and plan sustainable actions for the development of the city.

The Cyprus Energy Agency, in the framework of the **'Sustainable Historic City Districts'** project, conducted a study on the *'Quality of Life in the Historic Centre of Nicosia'* in 2019-2020. The need to prepare this assessment of the Quality of Life in the Historic Centre of Nicosia derives from the simple fact that there is limited understanding on how the local community perceives the current state of the walled city.

The study has been used, on the one hand, as a medium to start the conversation with the public about the sustainability of the centre and on the other hand, as a methodology to gather valuable input on the perceptions of the citizens about the area (from both sides of the Buffer Zone).

The aim of the study was to analyse the views of residents/workers/visitors within Nicosia on various aspects, that are either directly or indirectly related to the quality of life, and the natural, structured and social environment. The objective was to use the results of the study in order to identify the greatest needs and the priorities for the activities to be implemented in the historic centre within the framework of the SUSHI project.

The engagement of stakeholders, such as the public authorities, professionals, organised groups, and citizens was important, therefore the survey was disseminated in various ways.

The questionnaire was available online in the three official languages of Cyprus (English, Greek, Turkish) and included 29 short questions. The first 15 concern the socio-demographic characteristics of the respondents and they were used to evaluate the results. The final 14 questions were based on the **'Place Standard Tool'** and were designed to evaluate the current conditions in the area of the Historic Centre of Nicosia.

The 14 questions concern the following topics:

1. Moving around
2. Public transport
3. Traffic and Parking
4. Streets and Spaces
5. Natural Space
6. Play and Recreation
7. Facilities and Amenities
8. Work and Local Economy
9. Housing and Community
10. Social Contact
11. Identity and Belonging
12. Feeling Safe
13. Care and Maintenance
14. Influence and Sense of Control
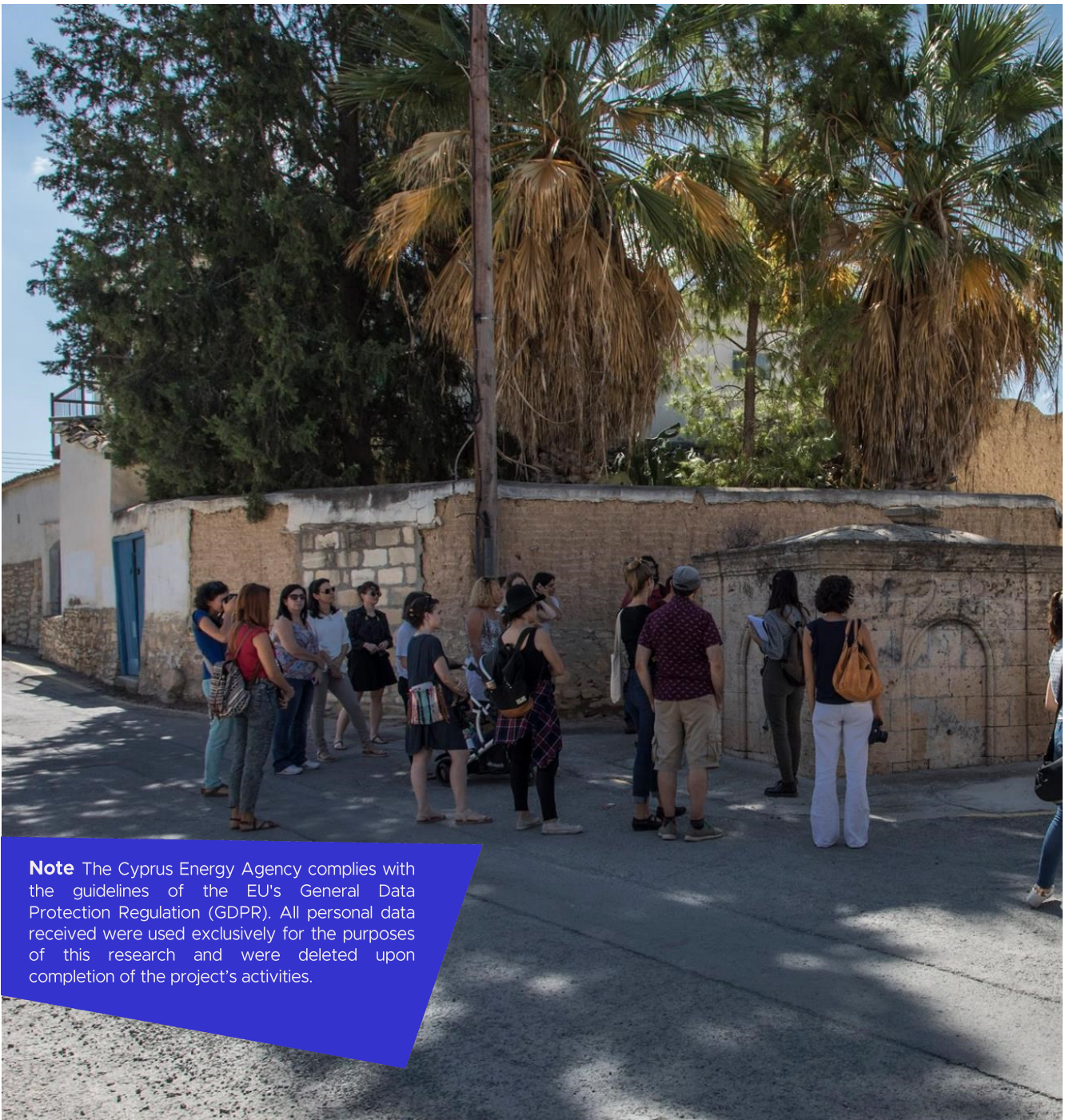
Note The Cyprus Energy Agency complies with the guidelines of the EU's General Data Protection Regulation (GDPR). All personal data received were used exclusively for the purposes of this research and were deleted upon completion of the project's activities.

Photos (above & below) from tours of Nicosia Photo Walks. © Nicosia Photo Walks Photo Archive

The Place Standard tool was developed by the Scottish Government, NHS Health Scotland and Architecture & Design Scotland*. The **"Place Standard Tool"** evaluates the quality, capabilities, and current conditions in the neighbourhood or the selected area through a simplified process, and has been used in similar studies abroad, for action planning. The tool can help identify areas where targeted actions can be taken on a priority. The evaluation of the historic centre by its users is probably the most reliable source for the identification of the needed actions.

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3.3.2 Findings and Observations
(graphs in Annexes 6.1)

The study sample was equally represented gender-wise (approx. 50% men and 50% women) and age-wise (50% young citizens under 35 - 50% elder citizens of 35 years old and older). Furthermore, the vast majority of the respondents of the questionnaire (90%) are Cypriots (including Cypriots who do not permanently live on the island).

More than half of the responses of the survey was from visitors of the centre of Nicosia, and despite the small sample, a first assumption is that the Old Town of Nicosia attracts many people from other areas of the city, or other parts of the island. The Historic Centre accommodates a small community of permanent residents and workers, probably because of the Buffer Zone and the particularities of its physical infrastructure. However, many people who do not live or work there, but feel somehow connected to the area, have dedicated their time to respond to the online questionnaire about the Quality of life in the Historic Centre of Nicosia, and to provide valuable information.

The results of our study showed that most of the respondents have been living, working, or spending their time in the historic centre of Nicosia for more than a decade. Even though this fact seems to be obvious for most urban centres, in the case of Nicosia it has a particular significance since the division of the island in the 70s and has left the historic centre neglected, underused and unvisited until the beginning of the new millennium. Although initially the local community had "turned their back" to the historic centre to avoid the painful memories of the division, the younger generations have started investing again in the revitalisation of the walled city.

Faneromeni area appears to be both geographically and culturally the "heart" of the public life of the city, as nearly half of the responses refer to this specific parish. Despite the very small sample of respondents referring to the North side of Nicosia, the area of Arab Ahmet and of Ayia Sofia (Selimiye) seem to be the most vibrant areas of the Turkish-speaking Nicosia.

An important finding of the study is that there are different viewpoints regarding the status quo of the Historic centre, depending on how the respondents relate to this area and specifically whether they simply hang out, or live and/or work in the intra-muros city.

Contradictions in the Historic Centre of Nicosia. © Cyprus Energy Agency Photo Archive

The quantitative and qualitative information reveal a discrepancy between respondents who live in the historic centre and those who either work or hang out in the area.

- The average rating of people who live in the area is higher than the ratings of the two other groups.

- Residents of the old town are particularly more satisfied with the accessibility of the area by public transport and the opportunities to move around, while they are more dissatisfied with the availability of parking spaces near their houses.

- People who only work or hang out in the area - not surprisingly - have rated the quality of housing opportunities in the old town quite low, compared to people who actually live in the area.

- Residents of the old town seem to value the social contact and the feeling of identity and feeling of belonging they get by living in the historic centre of Nicosia. On the contrary, people who are not part of the resident community do not seem to understand that there is social cohesion between the various groups currently living in the centre.

Another observation is that there is a discrepancy between the perceptions of the younger and older generation about the area. This is probably due to the fact that older people have seen the area being divided, dilapidated over the years and have witnessed its transformation through many decades.

- Nostalgia, lack of acceptance of the political situation, fear of contemporary changes led people who are older than 35 years old to evaluate the quality of the centre as generally low.

- People who are over 35 years old have given low ratings to both infrastructural and social aspects of the city centre.

- The younger generation have a better perception of the area particularly regarding its social capital (safety level, sense of identity and belonging, social contact and relations).

In general, most of the 14 aspects of the Place standard questionnaire have an aggregated rating **lower than the average** (Graph 16 in Annexes 6.1). The quality of natural spaces was rated the lowest of all aspects, bringing to our attention the **necessity of enriching the green public spaces in the city**. The physical aspects of the city e.g., the street infrastructure (including mobility services), the buildings, and public spaces and their maintenance seem to be less satisfying for the respondents.

Interestingly, the aspects related to the **social capital** of the historic centre such as "social contact", "identity and belonging", and "feeling safe" are rated close to average (3,5/7) and have **the highest average**. However, the respondents perceive that they have limited power and level of influence about the development of the city and a low sense of control over the decisions regarding the future of the historic centre.

3.3.3 What people say about Nicosia

Needs & recommendations Below we have summarised the comments of the respondents on the 'Quality of Life in the Historic Centre of Nicosia' assessment, in order to absorb qualitative information about the 14 topics of the survey and "feed" our action plan.

Moving around | Illegal and reckless parking behaviour make walking and cycling in the old town unpleasant. Even the pedestrianised streets are somehow occupied by the restaurants and cafés' chairs and tables. Sidewalks are narrow and are often obstructed by signs and bins, making it impossible to be used by people with disability and by parents with baby strollers. The roads are narrow and dominated by cars, but the fact that most streets are one-way means that cyclists can use them safely. The respondents suggest the whole city centre to be a shared space zone with low speed limit or even a car-free zone; only delivery cars should enter during early morning hours. People wish for more sidewalks shaded by trees and improved street lighting during the night.

Public transport | Citizens think the bus routes are not regular enough and there is a lack of information on signs about the routes and the timetable of bus departures and arrivals. Furthermore, the respondents express the need for shelters on bus stops to provide protection from weather conditions. Nicosia's historic centre is accessible via many bus routes but there is a need to improve the efficiency of public transport to better connect with other areas and make it a viable option both for the residents and the visitors of the city.

Traffic and Parking | People are unsatisfied with the lack of parking policy enforcement inside the city walls. The residents find it hard to park their cars near their homes and they often have to pay to park. Some of the respondents believe that the interests of shop owners are prioritised compared to those of residents regarding parking availability. Citizens suggest that only the cars of residents and delivery trucks should be allowed inside the walled city of Nicosia and municipal parking lots should be outside the walls.

Streets and Spaces | Historic Public buildings and churches with architectural value are beautiful and in good condition but there are lots of abandoned private buildings. The commercial areas with international brands (Ledras Street) within the historic centre have altered the local character. Respondents see the potential in making the old town of Nicosia very attractive if the maintenance and security levels are improved. There is a need for a cleaner and safer city centre with improved community and public spaces.

Natural Space | The green spaces along the city walls (moat of fortification) are not well connected with the rest of the city and inside the walls there is a lack of trees and landscaped spaces. The citizens need more green spaces and ask for upgrading of the existing ones to counteract the noise and air pollution from cars.

Play and Recreation | The city, as it is now, is not child-friendly. Inside the walled city there are very few accessible and safe playgrounds, that are often vandalised. The citizens ask for more open places for diverse and healthy entertainment for kids and families as well as for the elderly and disabled.

Facilities and Amenities | Proximity to some services is good, but the functional mix and diversity of uses in the historic centre should be improved so there is no need for residents to move to other areas for basic services. There are no pharmacies or medical centres inside the old town. There is a need for more clean public toilets.

Work and Local Economy | Respondents believe that the local economy is not well-developed. They suggest that the municipality provides incentives to boost the business sector and attract investment in the historic centre. The jobs are mainly related to cafés, restaurants and shops. The small local businesses struggle to survive, especially compared to international brands. More traditional craft and cultural related jobs need to be promoted.

Housing and Community | Lots of old and abandoned buildings are in bad condition and need immediate renovation for safety and aesthetic reasons. Landlords of deteriorated buildings offer low rents and immigrants choose to live there despite the danger for their safety and health. On the other hand, renovated houses and apartments in good condition have high rents, and they do not necessarily attract new local population. There is a gentrification trend that needs to be avoided by the municipality and the government.

Social Contact | There are no vibrant community centres where regular events can take place. The old municipal market (Agora) used to bring people together regardless of their cultural or other differences, but it is now reconverted into a Research Centre and citizens are not involved in this process. Respondents express their need for diverse opportunities for socialisation. People currently mostly socialise in cafés and restaurants.

Identity and Belonging | Some respondents who live in the area do not feel part of the community, mainly because they do not know or interact with their neighbors. On the other hand, people who have been living in their neighborhood for many years and know their neighbors, feel like they belong in the community. There seems to be a diversity of opinions about the multiculturality of the local community including Cypriots, foreigners and immigrants. Recent efforts, like organised walks and festivals, help to promote the old city and provide information to visitors about the history of the area.

Feeling Safe | Some people feel safe in their neighborhood (mostly those who live in the area) while others do not (mostly those who visit the area). People do not feel safe mainly because of the abandoned buildings and the dark streets. Respondents suggest to improve street lighting and improve the conditions in all areas of the centre.

Care and Maintenance | People are unhappy with the amount of rubbish and the bad smells coming from the bins of restaurants etc. There is a lack of waste bins and recycling bins in the whole centre, but they also need to be collected and cleaned more often. Respondents are especially disappointed with the bad maintenance of roads and sewers that causes flooding whenever it rains. Individuals do not respect the public spaces and throw away trash and old furniture. Ruined and old buildings are a danger to the people, while tagging and ugly graffiti on buildings degrade the neighborhoods.

Influence and Sense of Control | People feel that their opinions, ideas and problems are not heard by the Municipality. People want to participate in the decision making and be informed for all the decisions that concern their city. The municipality needs to find ways to engage the public to participate and to actively contribute to the sustainable development of their neighborhoods.

3.4 Transformative Actions

The topics of the **'Place Standard Tool'** were grouped in 4 thematic axes for the transformative actions which will lead to the realisation of the vision (page 8). Thus, all 14 topics that were evaluated via the Quality of Life in the Historic Centre of Nicosia study can be addressed through actions following the four overarching themes of **[1] Sustainable Mobility, [2] Environment & Public Spaces, [3] Uses & Activities, [4] Community & Social Capital.**

The 4 thematic axes are further explained with a non-exhaustive list of possible actions to be taken by the Local Authority (Nicosia Municipality) in collaboration with Government Departments, by the Private sector and the Civil Society. The enabling elements in terms of process, business models (possible ways to benefit and make profit from the transformative action) and potential synergies are also mentioned for each transformative action.

Sustainable Mobility	Moving around | Public transport | Traffic & Parking
Environment & Public Spaces	Streets & Spaces | Natural Space | Play & Recreation | Care & Maintenance
Uses & Activities	Facilities & Amenities | Work & Local Economy | Housing & Community
Community & Social Capital	Social Contact | Identity & Belonging | Feeling Safe | Influence & Sense of Control

Urban bench and canopy with climbing plants. © Cyprus Energy Agency Photo Archive
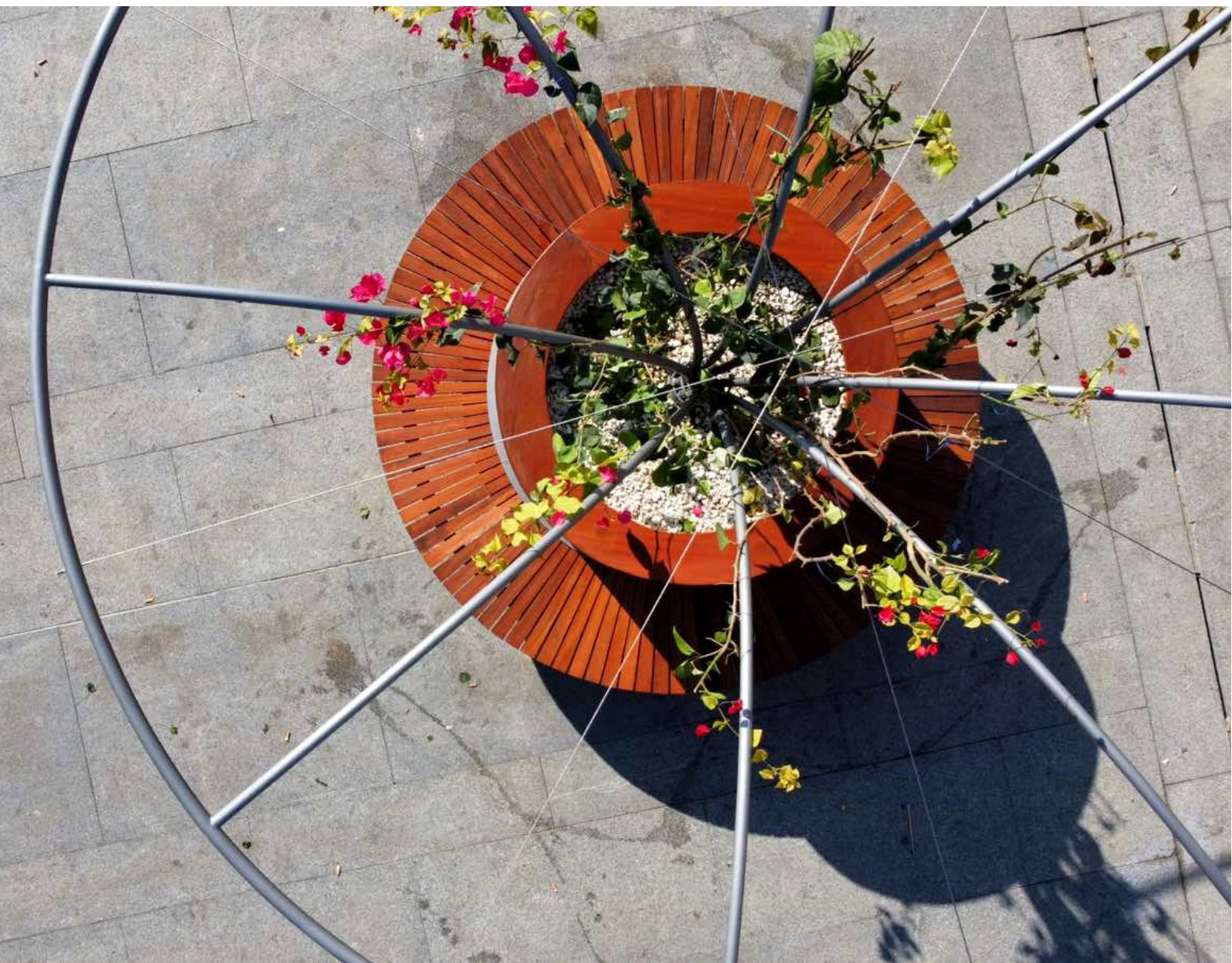
Cycling tour in the North of Nicosia. © Photos on this page belong to the Cyprus Energy Agency's Photo Archive

3.4.1 Sustainable Mobility

Like all medieval fortified cities, the intra-muros city of Nicosia is designed for walking and for accessing all basic needs within the distance of less than 1.5km. The uncontrolled urban development of the capital and its division in 1974, have resulted in a socio-spatially segregated city centre characterised with discontinuity and seclusion.

This thematic axe welcomes all actions that intend to provide opportunities and options for citizens who live, and/or work in the city centre or visit the area to move sustainably, while satisfying their needs to access places and services safely.

In December 2020, the open procedure for tenders for the study of the **Sustainable Urban Mobility Plan (SUMP)** of Nicosia started. The development of a Sustainable Urban Mobility Plan for the City of Nicosia, including the City Centre and the greater urban area of Nicosia, will give an emphasis on integration, participation and evaluation principles.

The vision of the SUMP is the creation of a sustainable city by 2030. In this context, the aim of the SUMP is to satisfy the mobility needs of people and businesses in the study area for a better quality of life, guided by the high-level objectives which reflect the objectives of the EU White Paper on transport, and the supporting SUMP Guidance.

Transformative Actions

1A : Promote Soft Mobility

1B: Reduce Use of Private Motorised Vehicles

1C: Increase Use of Public Transport

1D: Sustainable Transport for Logistics

Icons in the following pages 17-30 are downloaded from The Noun Project - thenounproject.com
Government by 23 icons, Citizen and Driven by Self Interest by Whichai Wi, Function by Made x Made

TRANSFORMATIVE ACTION 1a: Promote Soft Mobility

Human-powered transportation should be prioritised for the movements within the historic centre and in proximity, to encourage a healthy and environmentally friendly urban lifestyle. Accessibility and quality of pedestrian areas should be improved with the intention to meet the needs of all citizens and make the HUA a human-centred area that welcomes people from different backgrounds and with different abilities.

POSSIBLE ACTIONS

Local (Municipality) / National Authorities

- Improve pedestrian infrastructure (widen sidewalks, create pedestrianised zones, create shared space streets, improve street furniture and lighting)
- Improve infrastructure conditions for cycling and other micro-mobility vehicles (create cycling paths when possible and connect to the bicycle network outside the city walls, install safe bicycle parking infrastructure, create shared space streets)
- Provide incentives for the use of Nicosia's bicycle-sharing system

Private Sector

- Provide incentives to visitors and workers to walk / cycle to the centre

Civil Society

- Facilitate and advocate for safe access to vulnerable groups
- Promote walking and cycling to schools of the centre
- Enhance connectivity between the South and the North of Nicosia through community walks and bike rides

ENABLING ELEMENTS

PROCESS
- Urban Living Labs & Workshops to identify the needs of commuters
- Living Street events and Car-Free days as temporary tools for user behaviour change
- Enhance access to information through integrated Smart City Projects

BUSINESS MODEL
- Several studies have shown that people who walk and cycle shop more often in their area and spend more money in a month compared to people who drive
- Improving accessibility, connectivity and proximity to services will (a) boost the local economy and attract more businesses to re-locate in the centre , (b) attract new investments and building renovations and (c) attract more residents to live in the centre

SYNERGIES
- Visitor's Guide and Map of thematic routes and sightseeing itineraries connecting key locations in city - Nicosia Tourism Board
- 'Bike to Work' scheme in combination with Nicosia's bicycle-sharing system Next Bike
- Collaborate with citizen initiatives : Bicycle Mayor of Nicosia, Battle of the Pedestrians, Streets4all Cyprus, Oxygono

TRANSFORMATIVE ACTION 1b: Reduce Use of Private Motorised Vehicles

The use of private motorised vehicles should be discouraged in order to re-claim valuable public space from streets, to improve road safety and to reduce air and noise pollution. A car-free historic centre should be the ultimate goal.

POSSIBLE ACTIONS

Local (Municipality) / National Authorities

- Implement car access restrictions during specific times or create car-free zones within the centre (especially in high density and commercial areas)
- Enforce strict parking policy respecting the safety of all road users and protecting public/private properties
- Incentivise parking outside the walls, increase parking fees within the walled city and convert existing municipal parking areas inside the walls to accommodate other uses (public spaces, parks, multifunctional facilities, sport grounds etc.)
- Reduce parking requirements for commercial buildings within the city centre
- Reward / Penalty scheme to cars based on vehicle emissions or declare the Historic Urban Area as Low Emission Zone

Private Sector

- Boost car sharing and car pooling systems

Civil Society

- Organise awareness raising events to promote the use of alternative transportation modes and encourage active mobility

ENABLING ELEMENTS

PROCESS

- Urban Living Labs & Workshops to identify the needs of business owners, workers and residents
- Living Street events and Car-Free days as temporary tools for user behaviour change
- Use integrated Smart City Projects to monitor reckless driver behaviour and to crowdsource information on live traffic and road conditions

BUSINESS MODEL

- Use money from parking fees and savings from road infrastructure improvements to invest in pedestrian or cycling infrastructure or to subsidise local businesses

SYNERGIES

- Create public space installations (e.g. parklets) in former car parking spaces to improve the quality of the experience of the city (architects, urban planners, designers, creative community)

TRANSFORMATIVE ACTION 1c: Increase Use of Public Transport

Access to the city centre should shift to alternative means of transportation and access by bus should become a viable and comfortable option for those who come from longer distances.

"An advanced city is not one where even the poor use cars, but rather one where even the rich use public transport" Enrique Peñalosa

POSSIBLE ACTIONS

Local (Municipality) / National Authorities

- Improve bus stop infrastructure with shelters and benches
- Provide real-time information on routes and timetables with digital screens
- Facilitate intermodal solutions (bicycles can get onboard of buses) for both tourists and local commuters

Private Sector

- Provide incentives to workers to commute by bus and inform about nearby bus stops

Civil Society

- Organise awareness raising events
- Promote Mini-Buses for access to schools of the centre
- Facilitate and advocate for safe access to vulnerable groups

ENABLING ELEMENTS

PROCESS

- Urban Living Labs & Workshops to identify the needs of business owners, workers, students and residents
- Living Street events and Car-Free days as temporary tools for user behaviour change: the bus system can test and operate some journeys to provide valuable data information on the routes
- Enhance access to information through integrated Smart City Projects

BUSINESS MODEL

- Use money from parking fees and savings from road infrastructure improvements to invest in improving real-time information on bus journeys

SYNERGIES

- Cooperation with Cyprus Public Transport for multimodal interchange points and combination with cycling itineraries

TRANSFORMATIVE ACTION 1d: Sustainable Transport for Logistics

Logistics (transportation, loading and unloading of products) should be done by light electric vehicles or cargo-bikes in the city centre. In this way, the entrance of heavy-duty vehicles, which damage the infrastructure and burden the environment, in the narrow streets of the historic centre is limited or even prohibited, but also the centre is decongested especially in the early hours when the majority of the cargo operations are taking place.

POSSIBLE ACTIONS

Local (Municipality) / National Authorities

- Create a central station located in the surroundings of the venetian walls for big trucks to park and unload packages that will be then transferred to the historic centre with smaller environmental friendly vehicles
- Provide incentives to the private sector for the use of cargo bikes or smaller non-polluting vehicles for deliveries

Private Sector

- Improve efficiency of the transportation of products within the centre with better planning and using innovative tools and digital platforms for monitoring
- Invest in digital platforms for monitoring of logistics and in light electric vehicles
- Invest in a cargo bike for short to medium length trips to transfer products

Civil Society

- Advocate for reduction of air and noise pollution caused by delivery trucks and for improved road safety

ENABLING ELEMENTS

PROCESS

- Urban Living Labs & Workshops to identify the needs of companies and businesses
- Determine location for stations for unloading packages outside the historic centre
- Recognise the opportunities/possibilities of the current logistic companies

BUSINESS MODEL

- Maximising the efficiency of the transportation of products will save time and energy for the private sector
- Reducing air and noise pollution will improve the environmental and aesthetic quality of the commercial area of the historic centre
- New business and job opportunities will arise which can boost the local economy

SYNERGIES

- Collaborate with the Association of Shop Owners of Nicosia's Pedestrian Areas and the Association of Shop Owners of Ledras and Onasagorou Streets to create a shared vision for a vibrant commercial centre

3.4.2 Environment and Public Spaces

The architectural heritage of Nicosia consists of buildings that reflect its complex and rich history. The narrow streets and the low height of buildings give a unique picturesque character to the city. However, the built environment sets particular challenges in accommodating the needs of contemporary lifestyle. Moreover, Nicosia's walled city centre is vulnerable to the impacts of climate change due to the hot and dry climate, the increasing number of extreme weather events, the high percentage of impermeable surfaces and the low percentage of green areas.

This thematic axe enumerates actions that can make Nicosia a greener, cleaner and safer city with resilient and future-proof infrastructure.

Transformative Actions

2A : Upgrade of Built Environment

2B: Resilient and Functional Public and Green Spaces

* The Business models in parentheses for the Environment and Public Spaces Thematic Axe refer to the "Connecting Nature, Financing and Business Models" document, available at :

https://connectingnature.eu/financing-and-business-models

View from the Bastion towards the Moat. © Cyprus Energy Agency Photo Archive

TRANSFORMATIVE ACTION 2a: Upgrade of Built Environment

The restoration of cultural heritage buildings is very important for the identity of the historic centre. Some efforts are already initiated and implemented from the Municipality and Central Public Authorities, but further actions are needed for the integrated structural and aesthetic upgrade of buildings. The maintenance and restoration of the facades of the buildings in streets of high density is a priority mainly for aesthetic purposes, but this cannot be considered as a long-term solution. The buildings as a whole need to be restored and/or renovated in order to be in position for (re) habilitation. Energy renovations are also important as a lot of the buildings in the HUA remain unused due to poor internal conditions and high energy consumptions.

POSSIBLE ACTIONS

Local (Municipality) / National Authorities

- A thorough study of the structured environment should be undertaken, building on the results of the already implemented studies, such as for vacant buildings, buildings that need restoration, dilapidated buildings, and others. An integrated approach on a larger scale (not individual building) is preferable for the historic centre to ensure a uniformity and joint solutions. The current policy plans and preservation decrees should be taken into consideration
- Restoration and reuse of heritage buildings in key locations within the historic centre of Nicosia through funded programs and/or schemes, or by providing incentive to the private sector
- Promotion of use of environmentally designed solutions for the upgrade of buildings (NBS: green walls, permeable outdoor materials, rain gardens, green or brown roofs)
- Policy adjustments to allow RES installations in the historic centre, even at a small scale. Community PV systems, or virtual net-metering solutions can be created to serve the historic centre and avoid conflicts with existing legislative arrangements
- Temporary use of the buildings by the Municipality (usufructs)

Private Sector

- Restoration and renovation of private buildings within the historic centre
- Energy upgrade of private buildings within the historic centre
- Implementation of sustainable and environmental solutions on private buildings within the historic centre (thermal insulation and NBS: permeable outdoor materials, rain gardens, green or brown roofs)

Civil Society

- Reactivation of cultural heritage buildings to be used as shared spaces or community buildings
- Advocate for the protection of cultural heritage

ENABLING ELEMENTS

PROCESS

- Urban Living Labs & Workshops to raise awareness on the cultural value of the built heritage and the importance of preserving it and upgrading it for a sustainable city centre

BUSINESS MODEL

- Public-Private Partnerships | State & Structural funds (Listed Buildings, Ancient Monuments) | United Nations Development Programme
- Renovated Public buildings can be used for community activities or as means for income for the Municipality (usufructs)
- Upfront investments into urban Nature-Based Solutions (NBS) can lower future costs from extreme weather events such as droughts, storms and floods (Risk reduction model)*
- A 'no net loss' approach can incentivise or require offset investments into urban Nature-Based Solutions (NBS) that are lost because of real estate and infrastructure development within the city (Urban Conservation Offsetting model)*
- Subsidies / Incentives for RES installation

SYNERGIES

- SECAP and other strategies of the municipality can be used as the basis for the transition
- Collaborate with CYENS Centre of Excellence for the use of interactive media, smart systems and emerging technologies (Digital Twin City)

TRANSFORMATIVE ACTION 2b: Resilient and Functional Public and Green Spaces

Nicosia is characterised by the lack of climate resilient public spaces and green areas. In order to achieve the regeneration of the city and the transition to a more sustainable city, resilient spaces and public spaces are essential.

POSSIBLE ACTIONS

Local (Municipality) / National Authorities

- Implement an integrated approach on Nature-Based Solutions in public spaces to countereffect the heat island phenomenon, prevent the impacts of floods, and enhance biodiversity in the centre
- Create a green strategy for the moat surrounding the walls, with upgraded parks and thematic routes and green corridors connecting points of interest in the historic centre
- Create a child-friendly policy about public spaces and parks, and implement strategic actions to prevent vandalisation of public furniture and play structures
- Improve care & maintenance of streets, public spaces and urban furniture (e.g. street lighting)
- Improve the regularity of garbage collection and facilitate recycling of waste
- Invite artistic interventions in public spaces for cultural urban regeneration
- Promote outdoor activities and provide sports facilities in public areas
- Determine location for additional public toilets and improve cleaning services

Private Sector

- Implement circular economy strategies based on the philosophy "a man's trash is another man's treasure"
- Implement composting solutions for restaurants and hotels, and invest in private green spaces
- Adopt a design approach for public-private green spaces and invest via Corporate Social Responsibility

Civil Society

- Facilitate and advocate for safe access to vulnerable groups (children, elderly, people with disabilities, minority groups)
- Initiate sustainable solutions for clean open spaces such as community gardens, circular organic systems, tree-planting events, public space reclaim with site specific installations
- Implementation of Nature-Based Solutions at household scale (rain gardens, pollinator gardens)
- Creative use of public spaces with artistic interventions (murals and installations), festival organisation

ENABLING ELEMENTS

PROCESS

- Urban Living Labs & Workshops with stakeholders and specifically with the local community
- Provide information on Nature Based Solutions and raise awareness on climate change impacts
- Enhance access to information about weather conditions and quality of air through integrated Smart City Projects

BUSINESS MODEL

- Nature-Based Solution plots and trees can be "adopted" by citizens and businesses who are willing to protect and support nature in their neighborhood based on the direct value and sense of identity and meaning that they derive from it (Local Stewardship model)*
- The Municipality can provide space for local initiatives and (social) entrepreneurship in (sometimes temporarily) unused urban public space (Vacant Space model)*
- Nature-based solutions can be set up and managed to support environmental education for the schools within the historic centre and allow young citizens to engage with food and nature (Education model)*
- Greening the moat of the fortification can build on cultural values and cultivate a sense of identity to sustain and develop urban Nature-Based Solutions. The open spaces are part of cultural heritage that can lead to different types of value creation, ranging from tourism and education to cultural healing (Green Heritage model)*

SYNERGIES

- Gardens of the future Initiative
- 300 000 trees in Nicosia Initiative
- ZFWC - Zero Food Waste Cyprus initiative
- SECAP and other strategies of the Municipality can be used as the basis for the transition
- Collaborate with CYENS Centre of Excellence for the use of interactive media, smart systems and emerging technologies (Digital Twin City)

3.4.3 Uses and Activities

A city centre is by definition the most diversified and vibrant area of an urban settlement that concentrates different population groups and activities. Nicosia's division and the expansion of urban housing in the outskirts of the city have altered this image of the historic centre.

This thematic axe provides ideas on how the historic centre can become again the heart of the city and develop towards a sustainable and attractive place to live, work and recreate. The implementation of these transformative actions to diversify the uses

and activities of the fortified city can be then replicated by other Municipalities of the Region of Nicosia for their historic urban cores. Thus, the multi-centre city model can be developed.

Transformative Actions

3A : Mixed-Use Historic Centre

3B: Vibrant Local Economy

3C: Upgrade the Residential Qualities

TRANSFORMATIVE ACTION 3a: Mixed-Use Historic Centre

Increasing the functional mixity and diversity of activities taking place within the city centre will concentrate commercial activities and human interaction, minimising the need of residents and workers to commute to other areas to meet their basic needs. It will also make the city centre an attractive area where visitors will enjoy spending time in, and a unique local identity and lifestyle will be revived.

POSSIBLE ACTIONS

Local (Municipality) / National Authorities

- Ensure that the basic services are within the city centre or can be easily reached by the local population ("15 minutes city" concept). These services concern health-related facilities (e.g. pharmacies, public toilets), educational facilities, sport and well being facilities, cultural and recreational facilities, as well as security-related services (police, ambulance, etc.)

Private Sector

- Invest in business that provide value to the historic centre and satisfy the needs of the local community
- Organise start-up accelerator programs to boost innovation and entrepreneurship

Civil Society

- Support local businesses and facilities, and demand more mixed uses

ENABLING ELEMENTS

PROCESS

- Urban Living Labs & Workshops to understand the needs of the local community (residents, civil society and private sector)
- Collaboration between the Municipalities of the South and the North for complementary strategies

BUSINESS MODEL

- Minimising the number of movements in the historic area due to better interconnection of activities will have a positive impact on the quality of life and the quality of the built environment in the historic centre.
- Creating a vibrant city centre will attract external visitors and cultural tourism

SYNERGIES

- Building Owners & Associations, as well as the Turkish-Cypriot Property Management Service
- Municipality & Town Planning and Housing Department for clear distinction between commercial, housing and soft industry zones

TRANSFORMATIVE ACTION 3b: Vibrant Local Economy

Boosting the local economy and diversifying the provision of job opportunities in the area will make the historic centre a financially resilient area where innovative start-ups and traditional businesses coexist.

POSSIBLE ACTIONS

Local (Municipality) / National Authorities

- Provide incentives to boost the business sector (ie. low rents) and attract investment in businesses other than the hospitality industry for more diversity
- Subsidise small entrepreneurs to start businesses in the sector, attract innovative start-ups with appealing investment conditions
- Protect and showcase traditional professions and craftmanship
- Create a sustainable Tourism Strategy for the Historic Centre

Private Sector

- Invest in businesses that provide value to the historic centre and satisfy the needs of the local community (e.g. affordable rents)
- Create collaborations between the businesses of the historic centre through local associations
- Attract Digital Nomads and boost co-working spaces and shared economy models

ENABLING ELEMENTS

PROCESS

- Urban Living Labs & Workshops to understand the needs of the private sector

BUSINESS MODEL

- A strong local economy that is founded in local skills and expertise can withstand financial recessions
- Creating a vibrant city centre will attract external visitors as well as sustainable and cultural tourism

SYNERGIES

- Building Owners & Shop Keepers Associations, as well as the Turkish-Cypriot Property Management Service
- Complement the activities for the Regeneration of Nicosia's commercial triangle and the Creative Industry Quarter

Pythonos Street. Clairi Moustafellou published on www.kathimerini.com.cy

TRANSFORMATIVE ACTION 3c: Upgrade the Residential Qualities

A vibrant and sustainable historic centre is a place where the local resident community can thrive. Housing opportunities in Nicosia need to respond to the current needs of the community and to correspond to the contemporary lifestyle.

POSSIBLE ACTIONS

Local (Municipality) / National Authorities

- Provide opportunities for young families to settle in the historic centre
- Implement a socially inclusive strategy to housing to prevent gentrification or depopulation by creating regulations on rent prices. Ensure access to housing for different social groups and ensure a diversity of housing typologies
- Prepare schemes and provide incentives for rehabilitation of buildings

Private Sector

- Diversify housing typologies
- Invest in rehabilitation of buildings

Civil Society

- Facilitate and advocate for access to housing for vulnerable minority communities (migrants, refugees etc.)
- Organise community events to facilitate interaction between local groups

ENABLING ELEMENTS

PROCESS

- Urban Living Labs & Workshops to understand the needs and issues of residents

BUSINESS MODEL

- A permanent resident community and socially inclusive long term housing opportunities are foundations for socially cohesive city centre. People who thrive in their place of living tend to care more about their city and to be actively involved in its development

SYNERGIES

- Caritas Migrant Centre & Municipal Multipurpose Centre

3.4.4 Community and Social Capital

The development of the city can only be sustainable if it is co-created and co-led by the local community. Social capital is the effective functioning of social groups through interpersonal relationships, a shared sense of identity, a shared understanding, shared norms, shared values, trust, cooperation, and reciprocity.

This thematic axe focuses on the intangible social aspects of the historic centre of Nicosia, the soul of the city.
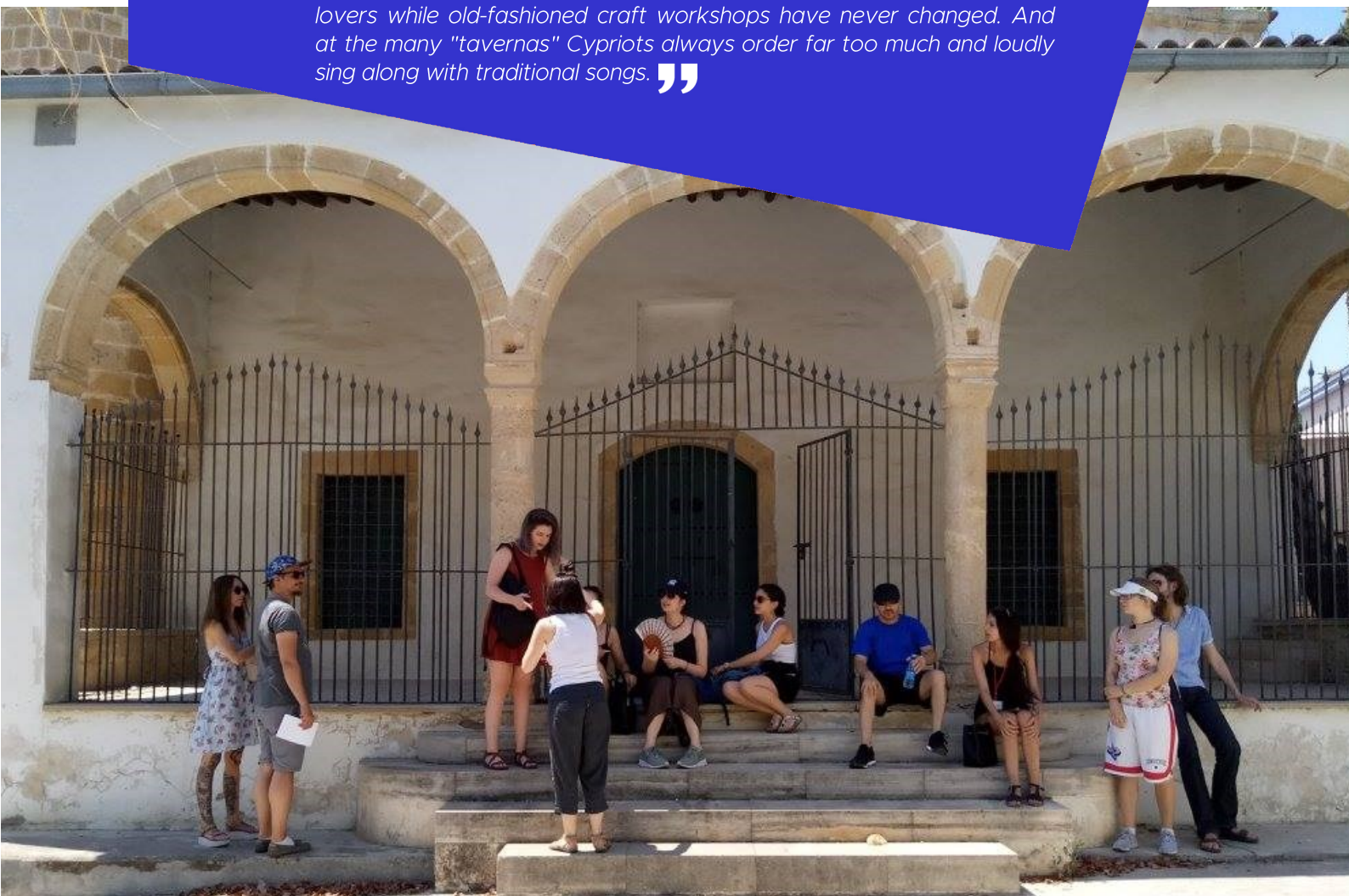
Transformative Actions

4A : Increase Social Cohesion

4B: Stakeholders Engagement and Effective Participation

Local Vibes A team of young creative Nicosians joined the European initiative of USE-IT and created a series of alternative free city maps for the centre of Nicosia. The USE-IT map is made by locals and give the best tips to explore the city and its Historic Urban Area. Below is their invitation to visit Nicosia:

> *Nicosia doesn't have a beach, so what?! It's got other stuff. Although pretty small, it's very chaotic and full of oppositions. We drink coffee for hours while soldiers change shifts, the imam is calling for prayer and church bells are ringing. Old men pass their day playing backgammon and ladies tiptoe around in sky-high heels in a fancy bar next-door. Galleries are filled up with (always the same) wannabe hipster art-lovers while old-fashioned craft workshops have never changed. And at the many "tavernas" Cypriots always order far too much and loudly sing along with traditional songs.*

Explorers of the city resting in front of Taht-el-Kale ©USE-IT Nicosia Facebook Page

TRANSFORMATIVE ACTION 4a: Increase Social Cohesion

Building a sense of community, identity and belonging is essential for the social sustainability of the community who lives, works and recreates in the historic centre of Nicosia. This is of ultimate importance in the divided capital which must aspire to repair its social fabric. Community Prosperity is defined by strong neighborhoods, where all individuals and families can access opportunities, build wealth, and enjoy a high quality of life.

POSSIBLE ACTIONS

Local (Municipality) / National Authorities

- Create vibrant community centres that host regular events providing opportunities for residents and visitors to interact. Opportunities for socialisation and entertainment should be diverse and welcome all age groups and social groups
- Accelerate efforts for social inclusion of minority groups living and working in the centre through municipal projects and by providing opportunities to the private sector and civil society to contribute and share responsibilities
- Encourage and support community initiatives with overlapping objectives with the Municipality's strategy
- Use CYENS Centre of Excellence as a platform for community interaction
- Introduce the role of community policing to increase the sense of safety

Private Sector

- Integrate commercial activities with community events
- Provide opportunities to employees to interact with local community

Civil Society

- Community members acting as 'Watch-dogs' that keep an eye on their neighbourhood
- Organise neighbourhood and cultural events, street and food festivals to create connections between people and places

ENABLING ELEMENTS

PROCESS

- Urban Living Labs & Workshops to understand the needs of the local community (residents, civil society and private sector)
- Collaboration between the municipalities of the South and the North for complementary strategies
- Full appreciation of the interplay of the complex dynamics between the economic, social and cultural processes of exclusion

BUSINESS MODEL

- Counteracting socio-spatial segregation in Nicosia's centre will allow it to develop in a coherent manner using its neighborhoods as key spatial scale for sustainable policy intervention

SYNERGIES

- Home for Cooperation for bi-communal activities
- Combine activities with Nicosia's Municipal Multipurpose Centre

TRANSFORMATIVE ACTION 4b: Stakeholders Engagement and Effective Participation

The active and effective participation of different community stakeholders in decision making on urban topics that affect the place where they live, work and recreate is crucial in order to ensure that a holistic approach is taken based on actual needs. A community which is active and well-informed will have more probabilities to be an alliance in the efforts for urban transformation. Contemporary forms of participatory democracy are needed in the Cypriot capital, to showcase effective processes and governance structures that deeply engage key people and organisations.

POSSIBLE ACTIONS

Local (Municipality) / National Authorities

- Bring innovation in public consultation methods in order to provide new ideas and more transparency about the suggestions concerning the commons.
- Use CYENS Centre of Excellence as a platform for citizens participation to host innovation and idea competitions (e.g. Climathon)
- Improve communication tools with citizens and ensure access to information for all citizens through e-Governance platforms about new actions, new projects, updates on on-going projects, and to raise awareness
- Activate community centres as platforms of interaction where people of all ages and all backgrounds can share their opinions
- Systematic exploitation of the information gathered from the online complaints form to allow progress monitoring
- Introduce Participatory Budgeting to allow the local community to vote for projects to fund

Private Sector

- Facilitate the creation of joint ventures for community activities
- Provide universal access to information through new technologies

Civil Society

- Facilitate participation of vulnerable groups in community events and ensure their opinion is heard

ENABLING ELEMENTS

PROCESS

- Stakeholder's analysis to recognise new opportunities and address the existing challenges of the historic centre
- Urban Living Labs & Workshops to understand the needs of the local community (residents, civil society and private sector) and to promote the co-creation approach
- Collaboration between the municipalities of the South and the North for complementary strategies
- Smart City Strategy: provision will be made for intelligent management features

BUSINESS MODEL

- Increasing citizen's participation and including different stakeholders in the process from the beginning will save time, money and energy as all voices and reactions will be heard before the project advances

SYNERGIES

- Combine activities with other Institutions in the historic centre

> *Old ideas can sometimes use new buildings. New ideas must use old buildings.*
> Jane Jacobs

3.5 Lessons from other cities

The partner cities of the SUSHI project consortium have implemented innovative practices in their context to promote the sustainable development of their city centres. European projects aspire to upscale the results of their activities by creating collaborations between the cities and ensuring the replicability of the solutions in other contexts. Stakeholders in Nicosia should draw inspiration from the following activities by adjusting the different elements to the Historic Urban Area of Nicosia in order to boost the innovative and entrepreneurial spirit of the capital and lead towards sustainable development.

Urban Living Lab - Savona (IT)

An Urban Living Lab (ULL) was conceived in Savona (Italy) during the SUSHI project activities, in order to engage people with a co-development process based on the concept of "open innovation". The Savona ULL, is a local place for innovative solutions aiming to solve urban challenges and contribute to long-term sustainability by actively and openly co-constructing solutions with citizens and other stakeholders (public, private, research centres). A key component of Savona ULL is the web portal for citizen participation, which has been developed as one of the final activities of the project in Savona to facilitate and encourage the citizens' participation on issues related to urban regeneration and sustainability of the city.

Green Spaces Mapping & tactical urbanism - Sassari (IT)

A GIS-based tool on green infrastructure of the historic centre of Sassari (including public and private green spaces) was developed during the project. This is the basis for the development of current and planning Urban Green Map of the district. This subject was selected as the key component to achieve the historic district vision. Therefore, significant efforts were allocated to increase the public awareness on green infrastructure and its relationship with climate change, through a series of local events and supported by a devoted website.

A toolkit for the design of public spaces between mitigation and adaptation to climate change were developed within the framework of SUSHI, based on tactical urbanism approach.

Link to Sassari Resiliente:
https://www.sassari-resiliente.it/

The Green Menu- Ptuj (SI) and Lisbon (PT)

Experts were commissioned to provide insights into the current situation of the urban building stock of the centres of Ptuj (Slovenia) and Lisbon (Portugal) and map meaningful revitalisation options with a specific focus on degraded historic building fabric.

An expert organisation, Bankers without Boundaries provided support for the business model and financial structuring options for a district-wide revitalisation, which is a big challenge for small historic centres.

Link to the Slovenian version:
https://www.zelenimeni.si/sl/po-vsej-drzavi/hise
Link to the Portuguese version:
https://www.menurenovacaoverde.pt/pt/em-todo-o-pais/casas

Alfama Toolkit - Lisbon (PT)

ALFAMA TOOLKIT is a webGIS tool conceived to support the future activities of ALFAMA LIVING LAB - the Urban Living Lab for the historic urban area of Lisbon - dedicated to catalyse innovation and climate adaptation while preserving and readapting the natural and social heritage and assets of the neighborhood. The Alfama Toolkit is composed by three main instruments:

1. Mapping: Aims to contribute to the knowledge and diagnosis of Alfama's historic area and surroundings by mapping stories and numbers. An infographic page was created providing information on sociodemographic, buildings &heritage, mobility, public spaces and local economy.

2. Experimenting: Aims to test some of the activities to be developed in the laboratory. In this context will be described the tactical urbanism activity SÃO VICENTE CÁ FORA.

3. Local community story-telling: Aims to tell successful and failure stories of the Alfama community.

Link to the Alfama Toolkit:
https://alfamatoolkit-lisboaenova.hub.arcgis.com/
Link to the infographic:
https://bit.ly/3iGUz75

4. The Historic Urban Area as a Hub of Innovation and Entrepreneurship

4.1 "Hubs of Innovation and Entrepreneurship for the Transformation of Historic Urban Areas" project [2020-2024]

The SUSHI project has reached its closure in the end of 2020 and passed on the torch to another project with the ambition to transform the historic centre of Nicosia.

The HUB-IN project, **Hubs of Innovation and Entrepreneurship for the Transformation of Historic Urban Areas**, aims to promote innovation and entrepreneurship in the **Historic Urban Areas (HUA)**, while preserving the unique identity of the historic sites regarding their natural, cultural and social values.

HUB-IN adopts the innovation and entrepreneurship as the main drivers of urban regeneration in HUAs and it is fully aligned with the International agendas for Cultural Sustainable Development (UNESCO) and Cultural Heritage Strategy (Council of Europe).

The Hubs of Innovation and Entrepreneurship (Hubs) will test, demonstrate and pilot activities of co-creation and co-design in three meaningful clusters with potential for sustainable transformation of HUA: i) Cultural and creative industries, ii) New lifestyles and iii) Endogenous Natural & Social Resources.

HUB-IN is expected to help reverse the trend of abandonment and neglect of the historic heritage in a systematic way, which may lead to the creation of new sustainable opportunities for local traditional businesses and the development of new creative skills and jobs.

HUB-IN will achieve its goals using the following methodology:

i) Building an ecosystem of interconnected Hubs to accelerate urban regeneration in eight HUAs,

ii) Creating value in pilot Hubs, piloting social innovation and accelerating sustainable entrepreneurship in HUAs,

Interactive book from the "Ledra Palace: Dancing on the Line" exhibition at the Leventis Municipal Museum, 2021 © CYENS

iii) Packaging, upscaling and exploiting the results and create collaborative global network of Hubs of innovation and entrepreneurship in HUA,

iv) Creating a HUB-IN digital space.

HUB-IN is funded by the European program "Horizon 2020" and consists of 18 partners from eight different European cities [Lisboa (PT), Utrecht (NL), Grand Angoulême (FR), Genova (IT), Slovenska Bistrica (SI), Belfast (UK), Braşov (RO) and **Nicosia (CY)**]. The Cyprus Energy Agency and the Municipality of Nicosia represent Cyprus and the Nicosia HUA.

Project Website: https://hubin-project.eu/

4.2 Nicosia HUB

The HUB-IN project provides an opportunity to create a common vision for Nicosia across divides and to embrace multicultural diversity for a sustainable and vibrant historic centre.

For achieving the goals for HUB-IN, the Nicosia partners will focus on the city centre as the driver for change and regeneration. The centre needs rejuvenation especially along the Buffer Zone where buildings have been neglected for decades and the need to reverse abandonment is undeniable. The restoration and revitalisation of the intra muros Nicosia, its traditional core and other degraded areas has the potential to contribute to integrated sustainable development, through the renovation and recovery of public spaces and building infrastructure.

The enrichment, protection, utilisation and sustainable management of elements of the natural environment, play a coherent and supra-local role in the implementation of other green practices that reduce the phenomenon of the urban heat island. In the revitalisation process of the HUA, the municipality also concentrates on the creation of a green walk along the perimeter of the walls and the moat within and outside the walls.

The Municipality of Nicosia makes efforts to attract start-up businesses (including creative), industry, but

" Yet in the end, sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs. We do not pretend that the process is easy or straightforward. "

World Commission on Environment and Development
In Our Common Future (1987)

Moat of the Venetian Walls , below Eleftheria Square © Nicosia Municipality Photo Archive

also researchers, in an attempt of cultural, social and entrepreneurial revitalisation of the area. The enhancement of historical, cultural and architectural heritage sites, museums, and creative spaces will also leverage the urban regeneration.

The city intends to develop a cultural and sustainable tourism strategy for Nicosia to attract tourists to the capital, which is difficult in the context of Cyprus where tourists seek access to the sea and sand and are less attracted by inland Nicosia.

The priority for the HUB of Nicosia is to bring together social, technological and entrepreneurial innovative groups and their ideas through inclusive approaches. Also there is a big need to align with the efforts of the CYENS establishment and exploit resources to expand the impact in the HUA of Nicosia.

4.3 Activity Clusters

The HUB-IN concept adopts a strategic cluster approach, based on the literature and in regional development policies, assuming that clustering activities generate positive effects on innovation. HUB-IN adapts this approach to HUAs and considers that the development of urban innovation ecosystems in HUAs will rely on a high level of specialisation in key sectors that will boost their urban regeneration. Therefore HUB-IN will develop their activities in three strategic clusters:

Cultural and creative industries (CCI), including cultural heritage, activities such as craftwork, digital animation, fashion design, visual arts, music, museums and others

New lifestyles (NLS), including activities based on digital technologies, circular economy, social innovation, sharing economy and sustainability

Endogenous Natural & Social Resources (ENSR), including reuse and readapt natural resources and social dynamics.

By sharing the same strategic clusters within the network of hubs, the HUB-IN project will leverage synergies between HUA´s, will boost the development of collective services and business services and deepen the links between innovation and industry.

Cultural and Creative Industries in Nicosia

- *DIGITAL TECHNOLOGIES:* There is a big shift towards digitisation taking place in Nicosia. This has the potential to grow because of the CoE CYENS, Nicosia Smart City Strategy and the activities of other Universities in the area of Nicosia.

- *CRAFT INDUSTRY:* The Traditional Neighborhood (Laiki Yitonia) gathers many shops with traditional crafts, while there are some small art & craft shops and studios in different areas of the city that also attract locals and tourists. Traditional woodworking & other construction related studios are based in specific streets with warehouses. The craft industry includes not only traditional craftsmanship but also contemporary studios which experiment with new materials and techniques.

- *CULTURAL HERITAGE:* The HUA concentrates the majority of architectural and historic landmarks of the urban area of Nicosia. The Venetian walls and other significant built constructions reveal the story of the city and the island [Ancient, Roman, Byzantine, Medieval (Frankish, Venetian), Ottoman, British Colonial Period, the independence and the division]. The museums of the city host various objects from the different eras.

- *FESTIVITIES:* The International Nicosia Festival, the Pop Up Festival, the Faneromeni Arts Festival, the Buffer Fringe Festival and other festivals initiated by different actors take place in the HUA and its proximity. The moat of the venetian fortification and its parks are often used for festivals and day-events.

New Lifestyles in Nicosia

- *MULTICULTURAL DIVERSITY:* The HUA of Nicosia is definitely one of the most diverse areas of the country in terms of "permanent" population (not visitors or tourists) with Greek Cypriots, Turkish Cypriots, as well as Asian and Middle East, African minorities. There are authentic products and shops of different cultures (Greek, Cypriot, Turkish, Armenian, Lebanese) from local people. The sounds of the city are also multicultural because of the different languages and religious practices.

- *SLOW URBAN LIVING:* The HUA is a vibrant area of the city but rhythms sometimes get very relaxed and slow...There are more people visiting the historic centre than actually living/working in the area, so people come to have a coffee, for a promenade, to socialise or to shop. There are different trends in lifestyle in the area compared to the rest of the city.

- *LOCAL ASSOCIATIONS (NGOS):* Many NGOs are based in the HUA (cultural, environmental, social) and many NGOs run their activities in the HUA raising awareness events in public squares etc on contemporary local and global issues.

A "sense of place" collage for the historic urban area of Nicosia © Cyprus Energy Agency

Endogenous Natural & Social Resources in Nicosia

- *SMART CITY STRATEGY:* A Smart City Strategy is currently being developed, led by the Municipality. Meanwhile, the flagship project of CYENS is iNicosia, which will set up a digital twin of the city.

- *SOCIAL INNOVATION:* The HUA is often the place where different human-centred initiatives locate their activities because of the diversity of social groups that interact in a close proximity. NGOs and citizen initiatives can be found in Nicosia's HUA promoting, for example, peacebuilding (Home for Cooperation) or social inclusion (Help Centres for migrants & asylum seekers).

- *SHARING AND CIRCULAR ECONOMY:* CYENS and other institutions within the HUA are currently developing Makerspaces to allow creatives to share skills and spaces, Co-working spaces are slowly appearing, other green initiatives promoting urban farming (Gardens of the Future) & saving food waste (ZFWC).

4.4 Stakeholders Mapping

The stakeholders mapping-analysis-engagement is an ongoing process and a crucial one as co-creation is a strong element of the HUB-IN project. A non-exhaustive list of stakeholders within the local community who are interested, or affected by the sustainable development of the historic city centre is presented in the following table. Their relevance to cluster activities of HUB-IN is illustrated as well, showing that a number of them operate across different activity clusters.

A more exhaustive list is being prepared by the team of the Nicosia HUB, analysing the levels of influence, importance and relevance of every stakeholder of the local ecosystem and in relation to the different phases of the project. The Municipality of Nicosia plays a crucial role in providing further support and structures for long-term engagement with stakeholders.

HUB-IN CLUSTER ACTIVITY	STAKEHOLDERS in the Historic Urban Area of Nicosia
	Cyprus Energy Agency
	Municipality of Nicosia (Mayor, Council, Committees, Services...)
	Nicosia Chamber of Commerce and Industry (EBEL)
	Nicosia Tourist Development and Promotion Company (ETAP) & Nicosia Tourism Board
	Relevant government bodies: Department of Town Planning & Housing Department of Antiquities, Deputy ministry of Research, Innovation and Digital Policy...
	CYENS, Centre of Excellence
	Museums & Art Institutions located in the HUA
	Design Services / Concept stores / Bookstores located in the HUA
	Galleries & Artist-run studios located in the HUA
	Cultural Centres and Cultural Venues / Theatres / Libraries located in the HUA
	NGOs and CSOs : Home for Cooperation, Oxygono, Urban Gorillas, Gardens of the Future...
	Citizen Initiatives : Agora Project, Zero Food Waste Cyprus, Nicosia Photowalks, USE-IT map, social media groups...
	Schools & University Departments located in the HUA
	Local Craftmen, Artists & Performers
	Students / Researchers
	HUA Residents
	Local Entrepreneurs & Business Owners (Shopkeepers, Hotels...)
	Start-up Incubator and Accelerator programs and financing bodies
	Tourists and visitors

5. Conclusion

Towards Sustainable Innovation

This document narrates *the tale of two projects* of the CEA, SUSHI and HUB-IN, which focus on the regeneration of the Historic Urban Area of Nicosia driven by the core values of sustainability and innovation.

The approach, ideas and transformative actions outlined in this document require careful planning and coordination between different stakeholders. In order to make Nicosia, a sustainable place to live, work and enjoy, actions must be taken by the local authority, the private sector, the civil society and the citizens themselves to ensure a future that is well grounded in the local culture and community. In order to make Nicosia a hub of innovation and entrepreneurship, new opportunities and organisational structures must emerge to support the co-creation between different sectors for building a resilient local economy.

The CEA promotes the actions in the thematic axes of Sustainable Mobility, Environment & Public Spaces, Uses & Activities, Community & Social Capital through its involvement in local and European projects. The CEA encourages the public authorities, the private sector and the civil society to implement these actions by using the suggested processes, by exploring innovative business models and by creating the relevant synergies in order to

sustainably transform the historic centre of Nicosia and co-create innovative solutions to contemporary challenges.

The CEA invites individuals as well as representatives of institutions and specific groups to embrace the efforts on bringing sustainable innovation in Nicosia and to draw inspiration from the approach of SUSHI and HUB-IN to realign their own initiatives.

Within the framework of our current activities for the HUB-IN project, CEA will continue the dissemination of this work to the stakeholders identified, and will share it across different communication platforms to reach all interested parties.

Nicosia's Hub of Innovation and Entrepreneurship for the Transformation of its Historic Urban Area aims to foster innovation and entrepreneurship in the walled city centre, while preserving the unique identity of the historic sites and the city's natural resources, cultural and social values. Through the HUB-IN project activities, the CEA with the active support and involvement of the Municipality of Nicosia wants to contribute to reverse the trend of abandonment and neglect of the walled city in a systemic way with innovation and entrepreneurship being the main drivers of urban regeneration.

Nicosia view from above, from Shacolas Tower. A.Savin-Wikimedia Commons-WikiPhotoSpace

6. Annexes

6.1 Survey Results

Validity and Research limitations

During a period of 16 months in 2019-2020, 445 answers were collected in total for the survey on the *"Quality of Life in the Historic Centre of Nicosia"*. The crucial part of the questionnaire was the 14 questions of the Place Standard Tool. Therefore it was decided to base the criteria for the validity of the responses (Graph 01) on whether the respondents have completed, or partially completed the 14 questions. The number of invalid answers (0%), meaning those who have not completed any of the 14 questions was 162. The number of invalid answers (<50%), meaning those who answered less than 7 out of the 14 questions was 44. The number of invalid answers (>=50%), meaning those who answered 7 or more than 7 out of the 14 questions was 18. The number of Valid answers meaning those who answered all 14 questions of the Place Standard Tool was 221, almost half of the sample.

In order to respect the reliability and consistency of the study, the quantitative results presented take into consideration only the answers of the 221 persons who have completed all the 14 questions of the Place Standard Tool.

Graph 01: Validity of Answers

Total answers = 445

- Valid answers = 221
- Invalid >=50% = 18
- Invalid <50% = 44
- Invalid 0% = 162
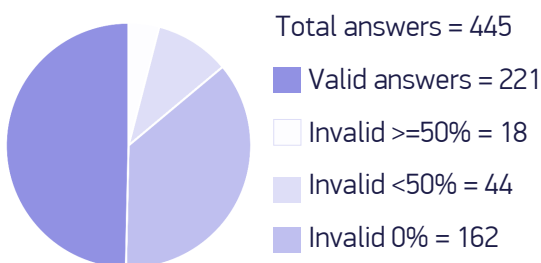
The following research limitations, aspects and conditions were identified. These are also linked to the limited time we had to carry out the research and might have influenced the results and conclusions.

1. *Limitations due to the survey methods:* The online questionnaire is more accessible for specific social groups and can be considered exclusive. However, a small amount of surveys were answered in person when CEA's staff approached citizens in public spaces, assisting them to answer the questionnaire. This was unfortunately not possible to continue after March 2020 due to restrictions for physical contact related to the Covid-19 pandemic. Moreover, Cyprus shut its crossings of the border between the South and the North, in a precautionary move against coronavirus as the two sides applied different sets of rules. Thus, the movement between the two parts of the divided capital remained restricted which did not allow the physical contact with the residents of North Nicosia and has limited the project's impact, since there were difficulties in implementing any activities between, or on, the North side of the city.

2. *Issues with sample and data gathering:* As mentioned previously, the socio-political situation of Nicosia did not allow the data gathering throughout the territory of the historic centre. There are some *sample bias* linked to the fact that the electronic questionnaire was shared in platforms and networks of people that may have similar characteristics. Even though the questionnaire was published in different mediums, there was a high level of "randomness" in the sample selection, something that could have been resolved with focus groups but time constraints did not allow to pursue this method. Additionally, the sample size is insufficient and cannot be used for accurate statistical measurements.

3. *Issues with the topic:* There is a lack of previous research studies on the quality of life in the HUA of Nicosia, or any similar studies gathering the perceptions of citizens on different aspects of the capital. Some conflicts and particularities arise from cultural bias and other personal issues among the respondents, linked to the socio-political situation of Nicosia.

## Living, working or hanging out in Nicosia

The Graph 02 illustrates that the majority of the people who responded to all 14 questions of the questionnaire hang out to the Historic Area of Nicosia (61%), while close to one fifth of the respondents work there (22%) or live there (17%).

Graph 02: Live, Work, Hang out

- I hang out there = 61%
- I work there = 22%
- I live there = 17%

As shown in Graph 03, out of the small sample of respondents who live in the area of the Historic centre of Nicosia, most of them reside in privately owned properties and close to 40% live in rented properties.

Graph 03: Residential properties

Privately owned = 62%

Rented = 38%
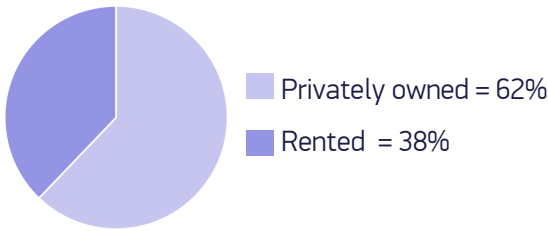
The Graph 04 depicts the number of people living in the household of the respondents who live in the area. Only a minority of the respondents share their home with 3 other people, while most of them live with 1 or 2 other persons.

Graph 04: Number of people / Household

41%

35%

16%

8%

1 2 3 4
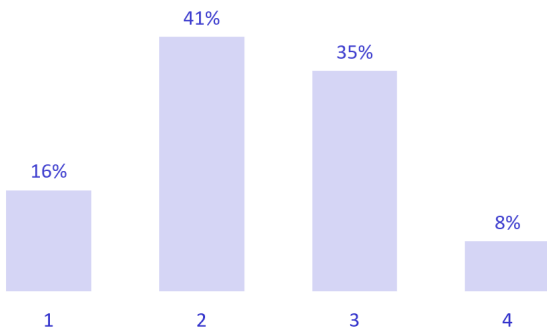
The Graph 05 shows the number of children (under 18 years old) live in the households. A big majority of the respondents do not have children or do not live with children.
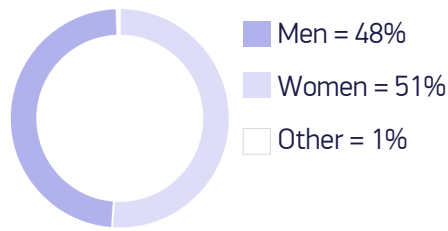
### Graph 05: Children / Household

68%

24%

8%

0 1 2
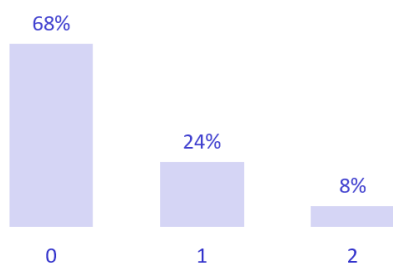
Sociodemographic

According to the Graph 06 there is an equal representation of men and women in the sample of respondents. There is also an equal representation of citizens that are younger than 35 years old and older, based on the Graph 07.

Graph 06: Respondents Gender

Men = 48%

Women = 51%

Other = 1%

Graph 07: Respondents Age

<35 years old = 50%

35-89 years old = 50%
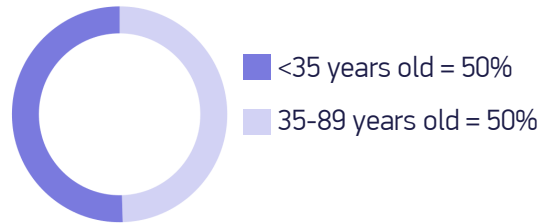
The Graph 08 shows that the majority of the respondents of the questionnaire, almost 200 people, are Cypriots (Greek Cypriots & Turkish Cypriots). It is important to note that this number may include Cypriots who currently do not live in the country.

Graph 08: Respondents Nationality

Cypriot = 198

Other Nationality = 23
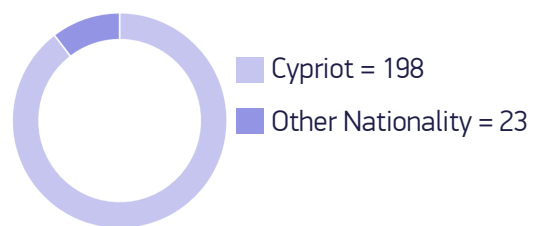
According to the Graph 09, the majority of the respondents have a university degree (most of them a Master degree), and according to the Graph 10, the majority of the respondents have a full time job.
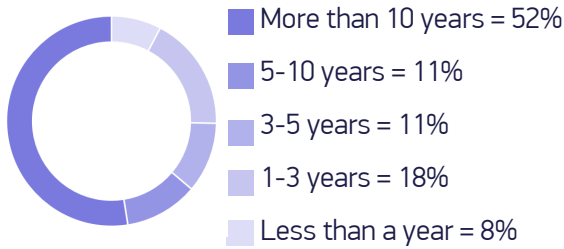
Graph 09: Respondents Education

Master = 58%

Bachelor = 26%

PhD = 9%

High / Technical School = 5%

Other or None = 2%
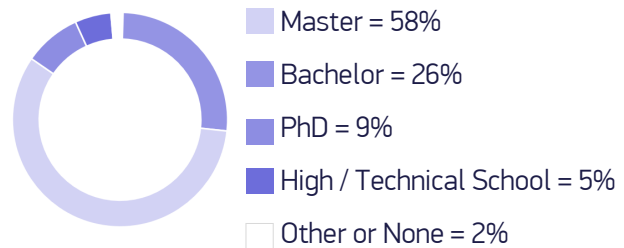
Graph 10: Respondents Employment status

Full-timer = 80%

Not working = 9%

Part-timer = 8%

Unemployed = 3%

The Graph 11 illustrates that more than 50% percent of the respondents have been living, working or spending their time in the historic centre of Nicosia for more than 10 years.
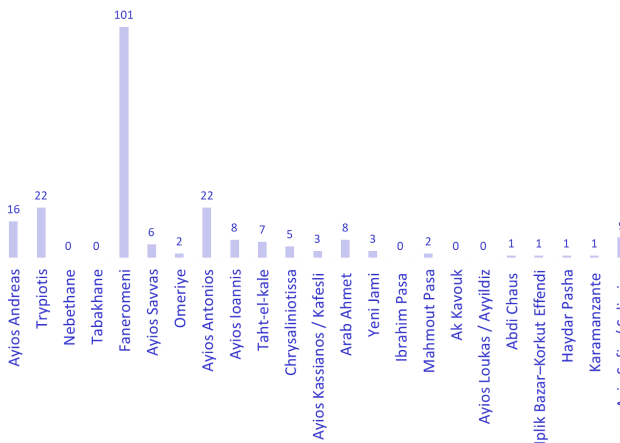
Graph 11: Respondents relationship with the centre

- More than 10 years = 52%
- 5-10 years = 11%
- 3-5 years = 11%
- 1-3 years = 18%
- Less than a year = 8%

Neighbourhood Profile

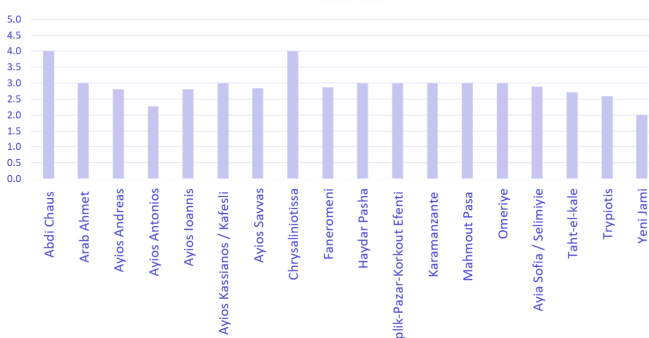*Onasagorou Street ©Cyprus Energy Agency Photo Archive*

The Graph 12 shows that there is an uneven distribution of the amount of valid responses per parish of the historic centre.

Graph 12: Valid Responses / Parish

Parish	Value
Ayios Andreas	16
Trypiotis	22
Nebethane	0
Tabakhane	0
Faneromeni	101
Ayios Savvas	6
Omeriye	2
Ayios Antonios	22
Ayios Ioannis	8
Taht-el-kale	7
Chrysaliniotissa	5
Ayios Kassianos / Kafesli	3
Arab Ahmet	8
Yeni Jami	3
Ibrahim Pasa	0
Mahmout Pasa	2
Ak Kavouk	0
Ayios Loukas / Ayyildiz	0
Abdi Chaus	1
Iplik Bazar–Korkut Effendi	1
Haydar Pasha	1
Karamanzante	1
Ayia Sofia / Selimiye	9

Nearly half of the respondents that completed the 14 questions of the questionnaire (valid responses) refer to the parish of Faneromeni. It is important to note that, there were more responses for other parishes but as explained in the Validity section, only valid responses were considered for the results.

Graph 13: Rating of Parish in relation to others

(Bar chart with ratings on a 0.0–5.0 scale for parishes: Abdi Chaus, Arab Ahmet, Ayios Andreas, Ayios Antonios, Ayios Ioannis, Ayios Kassianos / Kafesli, Ayios Savvas, Chrysaliniotissa, Faneromeni, Haydar Pasha, Iplik-Pazar-Korkout Efenti, Karamanzante, Mahmout Pasa, Omeriye, Ayia Sofia / Selimiye, Taht-el-kale, Trypiotis, Yeni Jami)

The Graph 13 shows the rating from 1-5 of every parish in relation to other neighborhoods, according to the respondents. As mentioned in the previous graph, there is an uneven representation between respondents of each parish so the average rating for every parish is not really comparable with other because the sample who rated every parish is different.

Based on the neighbourhood where respondents live/work/hang out within Nicosia, they have answered the 14 questions of the Place Standard Tool as explained in Chapter 2. The rating was on a scale from 1 to 7, according to the room of improvement the evaluated aspect has: 1 corresponds to a "Great room of improvement" (the neighbourhood situation is *not satisfactory*) and 7 corresponds to a "Little room of improvement" (the neighbourhood situation is *particularly satisfying*).

The spider diagram in Graph 14 illustrates the average rating for all parishes according to three types of groups: respondents who hang out, who live and who work in the historic centre. The diagram shows that respondents who live in the historic centre have rated the different aspects of their neighbourhood higher than respondents who work or hang out in the area.

The spider diagram in Graph 15 illustrates the average rating for those who are under 35 years old and for those who are 35 years old and above. This diagram shows that younger people have a better perception of the area compared to the older ones. This may relate to the fact that older people have seen the transformation of the centre through many decades and they tend to compare with the past.

Graph 14: Average rating per respondent type group

Legend: Hang out there, Work there, Live there
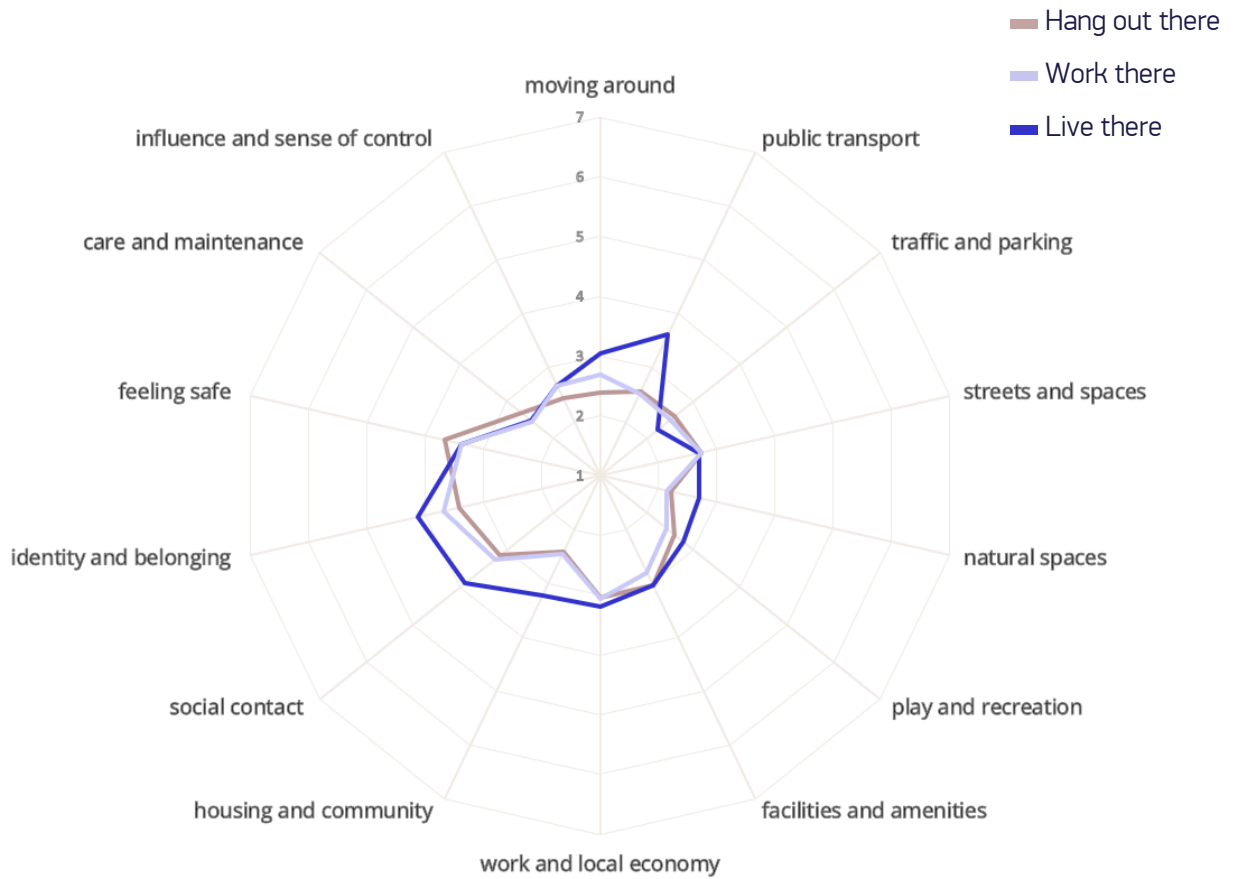
Graph 15: Average rating per respondent age group

Legend: <35 years old, 35-89 years old
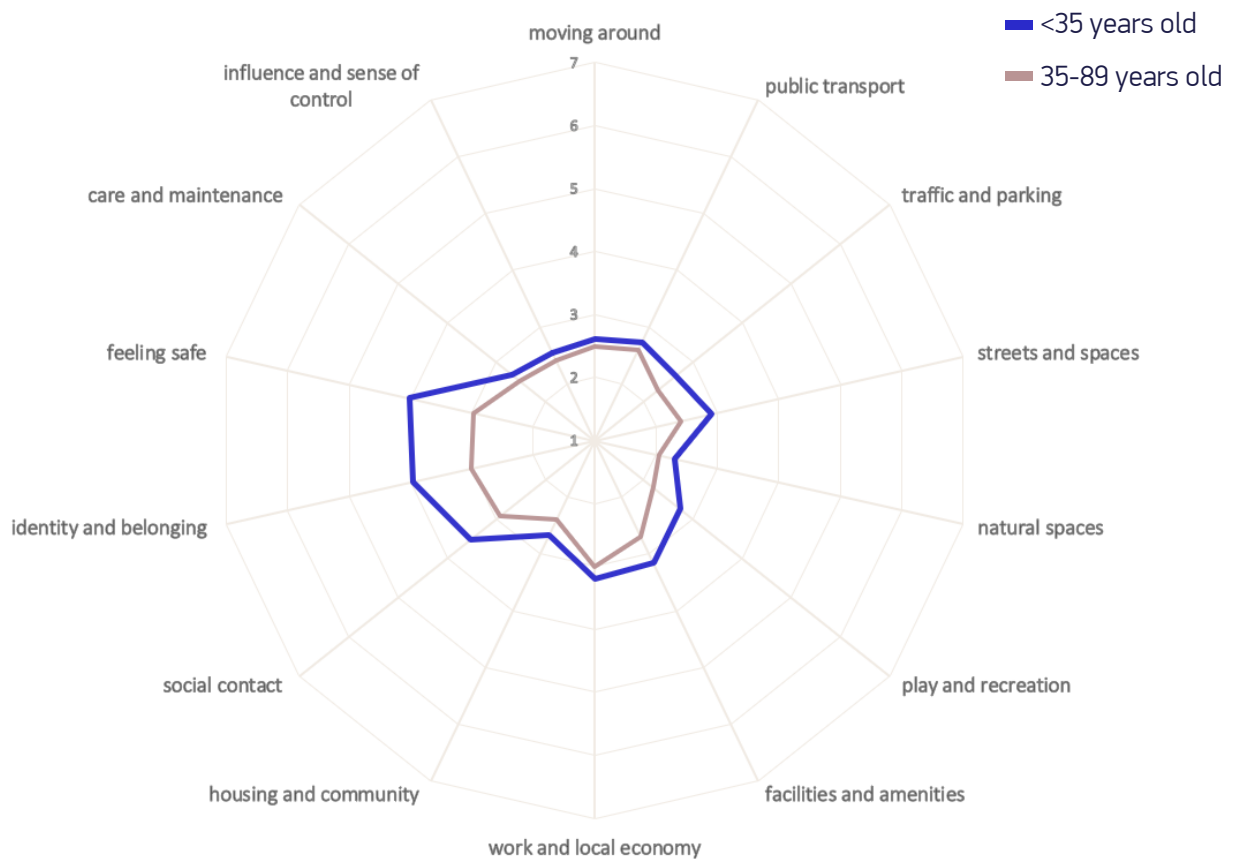
Nicosia's Historic Urban Area Profile

The Graph 16 depicts the average rating from all the valid responses for the whole of Nicosia's centre. Most of the aspects have a score below the average, and natural spaces is rated the worst (2.28/7). It is interesting to note that most aspects that are related to the social capital (facilities and amenities, work and local economy, social contact,

identity and belonging, feeling safe) are rated above 3/7. However, the aspects that are related to mobility, streets and public infrastructure seem to be less satisfying for the respondents.

The spider diagram (Graph 17) shows the average rating for the 14 aspects of the Place Standard tool for the neighborhoods of the South and the North of Nicosia. As already mentioned, the sample of responses gathered from the two areas are not equal in numbers, therefore the average rating of this graph is not representative, but it could be used to make quick assumptions for further research.

Graph 16: Average rating for each aspect for the whole of the HUA of Nicosia
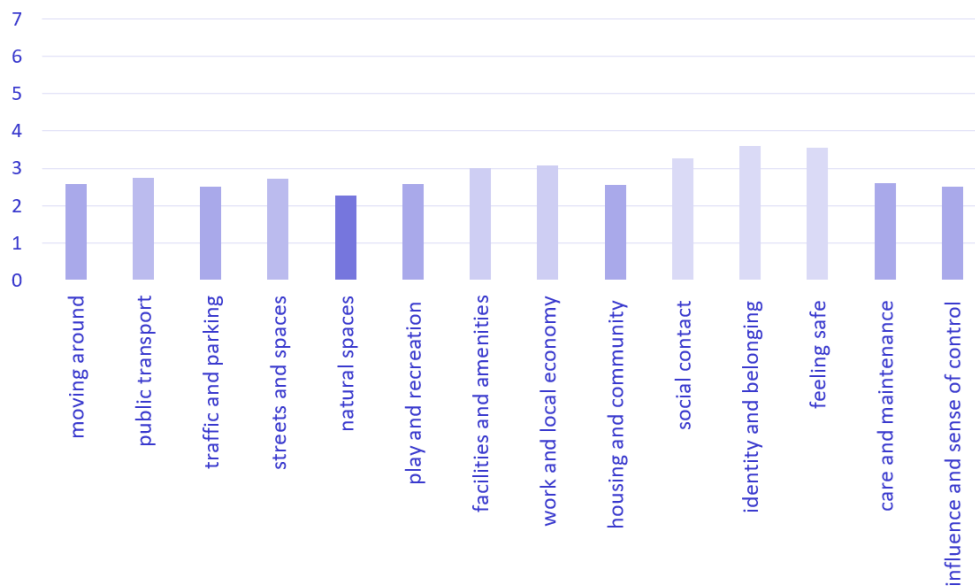
Graph 17: Average rating of the South and the North of Nicosia

44
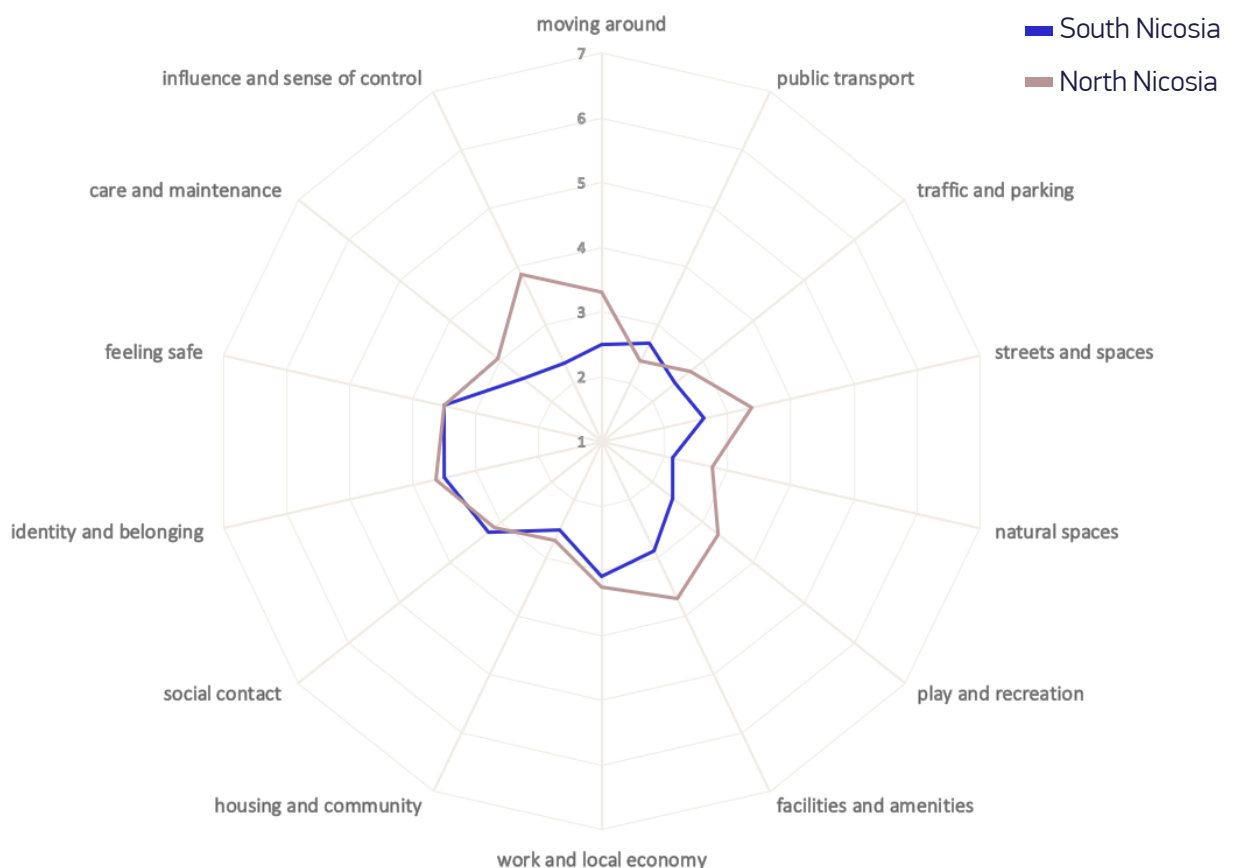
6.2 Pilot Projects

The Cyprus Energy Agency (CEA) in collaboration with the Municipality of Nicosia have implemented four pilot projects in public spaces of the historic centre, within the framework of the SUSHI project. The CEA has explored different possible solutions and after a process of research, design and evaluation, proposed four ideas to introduce the thematic of sustainable practices to the citizens that contribute to the resilience of the fortified city.

Three of the pilots focused on showcasing nature-based solutions in the context of the historic centre, while the fourth one took the form of a Living street event promoting various sustainable practices.

Transportation of the base of the structure.
© Cyprus Energy Agency Photo Archive

1. Urban bench and canopy with climbing plants

Platia Dimarchias is a public square in the heart of Nicosia, close to the Townhall, the premises of CYENS and other significant buildings. A nature-based solution was proposed as an addition to the urban furniture of the square, in order to introduce the importance of shade in Nicosia's public spaces to counteract the impact of climate change and specifically the extreme heatwaves and the urban heat island effect.

The goal was to tap into the qualities of this central square in order to raise awareness of the environmental challenges faced by our city and to enhance its value as a place for sociability and interaction.

Preparations for planting the climbing plants
© Cyprus Energy Agency Photo Archive

The installation of the four identical structures aspire to make the square more comfortable and friendly over the course of the day, and throughout all the seasons of the year. This composite structure contributes to the enhancement of biodiversity in the area, as the selected climbing plants attract pollinators but they also absorb carbon dioxide from the air.

The structure is a circular bench surrounding a planter containing a steel structure that aims to support climbing plants to provide natural shade. An important requirement for the design of the structure was that it had to be movable and not fixed on the ground of the square, below of which there are many municipal infrastructural services. Another requirement was to use construction materials with limited environmental impact.

The structures are used by residents and workers of the area for their short breaks during the day and by visitors during their walk in the city.

The climbing plants: bougainvillea and star jasmine
© Cyprus Energy Agency Photo Archive

The urban shade structure with bench and climbing plants
© Cyprus Energy Agency Photo Archive

2. "Pollinator Park" in Ayios Kassianos parish

The neighbourhood park of Ayios Kassianos is a green space connecting neighbouring private properties, the yard of Ayios Kassianos church, and the neighbourhood kindergarten. The location was selected because of the residential character of the area and its potential in raising awareness among the residents of Chrysaliniotissa neighbourhood.

The proposed solution was to introduce the theme of Pollination and promote and enhance urban biodiversity by planting selected local plants and creating spaces for birds and insects.

Pollinator Park in Ayios Kassianos parish
© Cyprus Energy Agency Photo Archive

Two different zones of the park were planted with native indigenous plants of Cyprus that can attract pollinators. The zones were landscaped in order to invite visitors to walk through them, and benches, signs, bird feeders and insect hotels were added to the existing outdoor furniture. An information sign was installed describing the objectives of the Pollinator Park and the importance of pollination in the face of climate change.

The maintenance of the park could be a shared responsibility between the department of green spaces of the Municipality of Nicosia, the residents and other stakeholders of the area.

The intervention aims to have an educational character as well, exploiting its vicinity with the kindergarten, encouraging the learning of topics such as biodiversity, pollination and climate change to the young citizens of Nicosia.

Pollinator Park in Ayios Kassianos parish
© Cyprus Energy Agency Photo Archive

3. Enhancement of biodiversity of the green space of SPEL and opposite Famagusta Gate

The third location that was selected for an NBS intervention is the green space that is in front of the SPEL (State Gallery of Modern and Contemporary Cypriot Art) and opposite the Famagusta Gate.

This green space is adjacent to the main road surrounding the city walls and is located near public and cultural institutions. The main purpose of this intervention is to raise awareness about climate change and the loss of biodiversity to a wider audience because of its high visibility and accessibility.

This NBS implementation also has the potential to be combined with the art-related activities organised by the administration of the SPEL Gallery. The theme of pollination could be used for artistic activities for children and integrate environmental awareness in learning activities.

SPEL Gallery's green space
© Cyprus Energy Agency Photo Archive

Indigenous plants were planted to enhance the existing landscaping, and information signs were added in order to raise awareness about the importance of pollination in the urban environment. Bird feeders and insect hotels were also installed to welcome the pollinators.

4. Living Street event in Peonos street

In cooperation with the Municipality of Nicosia, the Cyprus Energy Agency organised the social event "Meet us in Peonos street" in November 2020. The event took the form of the "Living Street" concept, as the street "opened" for its residents and visitors, inviting them to participate in activities related to best practices for the Sustainable Development of

the historic centre of Nicosia.

Those who attended the event had the opportunity to participate in multiple workshops, such as the creation of rain-gardens and bird-feeders, the repair and maintenance of bicycles, and the creative re-use of different materials.

Participants also had the opportunity to interact with others through the Human Library concept and "street games". The activities attracted both the residents of Peonos Street, as well as visitors of the historic centre.

The 'Living Street' event was implemented within

Bicycle Repair Workshop—Living Street in Peonos
© Cyprus Energy Agency Photo Archive

SPEL Gallery's green space © Cyprus Energy Agency Photo Archive

DIY Bird Feeder Workshop - Living Street in Peonos
© Cyprus Energy Agency Photo Archive

DIY Planter Raingarden Workshop—Living Street in Peonos
© Cyprus Energy Agency Photo Archive

the historic centre to address societal aspects and bring closer the citizens and inhabitants of the historic centre to rethink public space and to reclaim back space from the street for public use. This initiative promotes the ideas of the thematic axe of 3.4.1. Sustainable mobility (page 16).

The event was of a small scale and considered as a forerunner of greater actions that will boost the transformation from temporary to permanent solutions. A specific learning from the implementation of this initiative, is that many key actors should be engaged in the process, and the activities should be chosen based on the demographics of the area and also on the site's characteristics, to ensure success.

Hopscotch & Street Games - Living Street in Peonos
© Cyprus Energy Agency Photo Archive

6.3 Synergies

Gardens of the Future

Within the project framework local synergies, notably with the 'Gardens of the Future' have been established to ensure a long-term cooperation among projects and initiatives which have the same purpose: the sustainability of Nicosia's historic centre.

Planting with the local community
© Gardens of the future Photo Archive

The farmers module with the water system installation
© Gardens of the future Photo Archive

The 'Gardens of the Future ' aims to enable locals to become agro-entrepreneurs in the heart of Nicosia, so that the city can become a catalyst for sustainable action and position in Nicosia as a role-model city.

The 'Gardens of the Future ' Initiative is based on three main aspirations, also shared by the SUSHI project. These involve:

a. *Building Communities:* Sharing experiences through a communal garden to facilitate the circulation of ideas and practices of care and hospitality.

b. *Environment:* Embracing a circular economy approach, promoting the philosophy of building from 'waste' and practice the loop of recycle – reuse – reduce. The design of the garden becomes an ambassador of innovative techniques around responsible farming and creates a dynamic urban food sharing ecosystem.

c. *Agro-entrepreneurship:* The garden's aim is to be a social hub in the city and create new work opportunities for the neighborhood and beyond. Celebrating a 'sharing economy' and support locals in how-to create their own gardens, grow their own food and open paths for economic freedom around agriculture activities.

Based on the shared aspirations, the CEA team worked closely with the 'Gardens of the Future' for the implementation of a pilot (community gardens), based on NBS, in the heart of the historic centre. The CEA has supported the installation of a water recycling and reuse system for a farmers market module.

The information sign for the module and the water system
© Cyprus Energy Agency Photo Archive
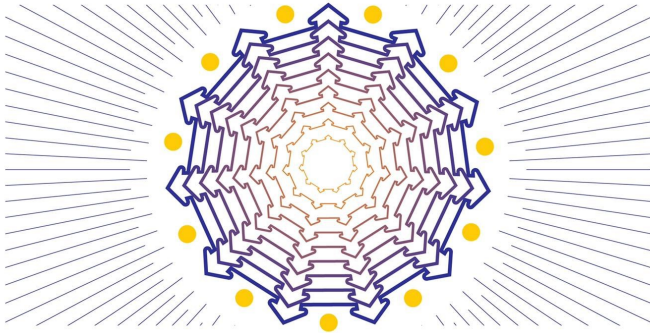
Nicosia 2040

The Cyprus Energy Agency has collaborated with the independent, non-profit, non-governmental organisation Oxygono, and co-organised the online discussion entitled "The revitalisation of the historic centre of Nicosia: past, present and future", on Thursday 22 April 2021. The discussion was the third of the series of "Nicosia 2040" events of Oxygono and was featured on the organisers' Facebook pages and is now available on Oxygono's YouTube channel.

The discussion panel was composed by: Andreas Markides (Transportation Specialist and director of Markides Associates), Maria Achilleos (Architect Engineer at the Cyprus Energy Agency) and Athena Papadopoulou (Senior Architect / Town Planning Officer at the Municipality of Nicosia and Head of the Unified Regulatory Office of Nicosia). The discussion was moderated by George Mesaritis (Civil Engineer and director of the office Polytia Armos) and greeted by the Mayor of Nicosia, Konstantinos Giorkatzis.

The Mayor of Nicosia, Mr. Giorkatzis, through his videotaped greeting, stressed that the goal of the Municipality is to regenerate the city and create the necessary structures and conditions to attract new investors to revitalize the city at various levels, such as in the areas of support and promotion of culture, the preservation and promotion of the traditional architectural heritage, as well as the creation of new infrastructures for social services.

The four themes of the discussion between the three guests, were (1) urban regeneration and sustainable development, (2) cultural heritage and architecture, (3) activities, experiences and land uses, and (4) society, innovation and participation, which reflect the thematic axes outlined in section 3.4. All three of them agreed that Nicosia has overcome the decline caused by its division and is now ready to create a new future with the active involvement of the local community (including all citizens from all backgrounds).

Abbreviations

CEA	Cyprus Energy Agency
CSO	Civil Society Organisation
CYENS	Centre of Excellence in Nicosia
EU	European Union
GDPR	General Data Protection Regulation
GHG	Greenhouse Gas
GIS	Geographic Information System
HUA	Historic Urban Area
HUB-IN	Hubs of Innovation and Entrepreneurship for the Transformation of Historic Urban Areas
NBS	Nature-Based Solutions
NGO	Non-Government Organisation
Lab	Laboratory
PV	PhotoVoltaics
R&I	Research and Innovation
RES	Renewable Energy Sources
SEAP	Sustainable Energy Action Plan
SECAP	Sustainable Energy and Climate Action Plan
SME	Small and Medium-sized Enterprises
SUMP	Sustainable Urban Mobility Plan
SUSHI	Sustainable Historic City Districts
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural

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