



**Building Urban Economic Resilience
during and after COVID-19**
#urbaneconomicresilience

Regional Policy Brief on building urban economic resilience during and after COVID-19 in the UNECE region



**Regional Policy Brief on
Building Urban Economic Resilience during and after COVID-19
in the UNECE Region**



Acknowledgments

This Regional Policy Brief “Building Urban Economic Resilience during and after COVID-19 in the UNECE Region” was developed by the United Nations Economic Commission for Europe (UNECE) as part of its United Nations Development Account (UNDA) COVID-19 “Rapid Response” project on “Building urban economic resilience during and after COVID-19.”

UNECE wishes to acknowledge the members of the Housing and Land Management secretariat for their contributions to the completion of the Policy Brief.

Juan Valle Robles, a consultant at the UNECE Housing and Land Management Unit is the lead author of the Policy Brief.

UNECE also acknowledges the contribution of Thorfinn Stainforth, Policy Analyst, Low Carbon and Circular Economy, Institute for European Environmental Policy, Brussels, Belgium.

CONTENTS

Acknowledgments	iii
Executive Summary	v
About the Regional Policy Brief	1
Introduction.....	6
Part I. Challenges and Policy Responses to the COVID-19 Pandemic	7
Urban governance.....	7
Socio-economic challenges resulting from the COVID-19 pandemic	9
Nature-Based Solutions and Climate Neutrality.....	17
Urban Planning and Transportation.....	18
Part 2. Proposed Solutions and Innovative City Responses to the COVID-19 Pandemic	21
Urban governance and digital transition	22
Socio-economic impacts of the COVID-19 pandemic	23
Nature-Based Solutions and Climate Neutrality.....	24
Urban Planning and Transportation.....	25
Conclusions and recommendations	27
Bibliography	29

Executive Summary

The COVID-19 pandemic has had a multi-dimensional effect on the UNECE region, causing the worst economic contraction in decades. Cities and urban areas are at the epicentre of the pandemic, with high population density and interconnectivity making them particularly vulnerable. The pandemic has impacted urban economies, equity, employment, public services, infrastructure and transport, affecting virtually all individuals, especially vulnerable households, businesses and workers.

There is no one policy or action to tackle the complexity of the socioeconomic impact of the pandemic. Instead, this impact needs a whole-of-society approach. An effective response should:

- Be multi-dimensional, coordinated, swift and decisive
- Reinforce urban economic resilience, create value and provide tangible solutions for the whole community, leaving no one behind
- Use evidence-based approaches, enabling decision-makers and policymakers to implement recovery plans
- Encourage multi-governance and multi-stakeholder engagement to promote urban economic resilience during and after the pandemic.

This regional policy brief is aimed to:

- 1) Provide an overview of the socio-economic impact of the COVID-19 pandemic in the UNECE region and gain a better understanding of urban economic resilience challenges during and after the pandemic.
- 2) Identify broader urban economic resilience needs of cities arising from the multi-dimensional impact of the pandemic in the context of recovery plans.
- 3) Offer policy recommendations, best practice examples, tools and mechanisms for sustainable urban economic recovery.

To achieve these objectives, this regional policy brief analyses the impact of the pandemic on urban economic resilience and formulates policy recommendations in the following four thematic areas:

- Urban governance
- Socio-economic impact of the COVID-19 pandemic
- Nature-based solutions and climate neutrality for environmental quality
- Urban planning and transportation policies and programmes.

This policy brief builds on knowledge developed within the global project on “Building urban economic resilience during and after COVID-19” which is supported by the United Nations Development Account (UNDA) programme¹.

The policy brief also includes an analysis and recommendations of a background document “City action for a resilient future: Strengthening local government preparedness and response to emergencies and the impact of hazards and climate change” prepared by the UNECE secretariat in 2020.

¹ Building urban economic resilience during and after COVID-19 <https://urbaneconomicresilience.org/>

Challenges

Cities are especially vulnerable to the effects of the pandemic; the socio-economic and financial consequences have severely reduced cities' economic productivity, jobs and revenue. Recovery from socio-economic crises takes years and produces numerous collateral effects, including exacerbation of social, spatial and economic inequalities, especially for vulnerable groups. Meanwhile, local public budgets are severely strained by declining tax revenues and a sharp increase in demand for social services and income support.

Cities have been at the forefront of addressing the challenges posed by the COVID-19 pandemic. For example, “lockdown” orders in cities led to unprecedented decreases in mobility, economic and social activities. Policy response should thus reflect these changes in the UNECE region and integrate COVID-19 recovery plans into strategies for building long-term urban economic resilience, thereby helping cities “recover better”.

Building urban resilience while containing the pandemic and mitigating the resulting socio-economic impact represents a considerable challenge for local governments. This is especially so given diminished budgetary resources.

Proposed solutions and innovative city responses to the COVID-19 pandemic

Governments should ensure that COVID-19 recovery measures focus on supporting the urban economy, jobs while ensuring long-term green and sustainable urban development, including measures for economic resilience, to respond to both the pandemic and climate crisis. The measures to support economic urban resilience must include funding for nature-based solutions, upgrading public spaces, providing accessible infrastructure and expanding reliable and resilient public transit.

COVID-19 recovery measures should transform urban systems rather than simply rebuilding outmoded structures. Collaboration across all levels of government and with civil society is vital to success. All cities need to develop urban economic resilience adaptation and recovery plans fully integrated into urban planning strategies with the technical, legislative and financial support of their national and regional governments.

About the Regional Policy Brief

The World Health Organization (WHO) declared COVID-19 to be a pandemic on 11 March 2020. The United Nations Secretary-General, Mr. António Guterres, stated that “COVID-19 doesn’t discriminate, our efforts to prevent and contain it do. For that reason, the pandemic has hit the poorest and most vulnerable in our societies hardest. The social and economic impact of the pandemic is enormous and growing”².

COVID-19 has spread throughout the world, infecting almost 111 million people and killing nearly 2.4 million worldwide as of 25 February 2021. According to WHO, by February 2021, COVID-19 led to nearly 60 million confirmed infections with over 1 million deaths in the UNECE region. The UNECE region has been particularly hard-hit by the pandemic, accounting for 36 per cent of global infections and 35 per cent of global deaths³. An effective vaccination roll-out campaign has proved to be the most promising means for mitigating the pandemic. The UNECE region is the leader in the global vaccination process according to the official WHO data dashboard⁴.

In this challenging context, cities in the UNECE region urgently need to build urban economic resilience into their recovery plans. The approach needs to be holistic, addressing challenges related to governance, socio-economic development, funding and financing.

In response to the public health crisis, UNECE member States have taken measures to prevent the spread of the virus, the most common being varying state-wide lockdowns. The magnitude of these has adversely affected trade, business, consumption and employment throughout the region. Small and medium enterprises (SMEs), services, the creative industry and tourism are among the most heavily affected sectors by national lockdown and containment policies.

The pandemic has led to a historic decline in economic activity and living standards globally (see figure 1), further exacerbating inequalities and disproportionately affecting vulnerable groups⁵. The related economic losses are dramatic, with the global economy contracting by 4.4 per cent and the UNECE region economy by 5.9 per cent in 2020. While the global economy has demonstrated modest growth above 2020 levels with projected growth of 5.2 per cent in 2021, the UNECE region has demonstrated only partial recover with 4.8 per cent growth throughout the same period.

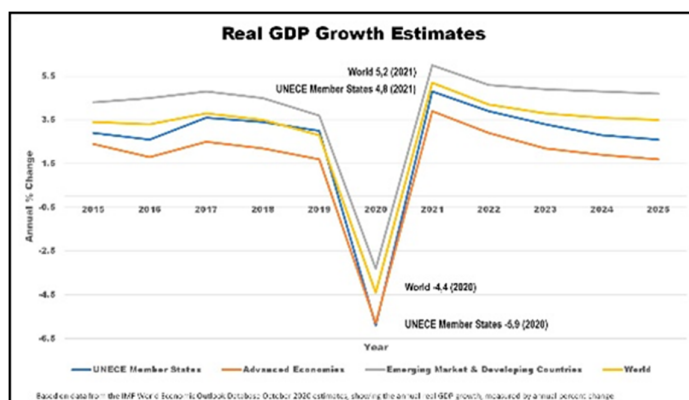
² United Nations Secretary-General. General Assembly Special Session in Response to the COVID-19 Pandemic on 3 December 2020. UN Web TV. Available at http://webtv.un.org/watch/ant-per-centC3-per-centB3nio-guterres-un-secretary-general-on-the-31st-special-session-of-the-general-assembly-in-response-to-the-coronavirus-disease-covid-19-pandemic-3-4-december-2020/6213891915001/#t=18s_

³ Data based on WHO Statistic COVID-19 dashboard collected on 2 February 2021. Note that of the 1.178.667 reported deaths in the UNECE region, 437.964 cases were from the United States. Available at <https://covid19.who.int/>.

⁴ WHO Statistic COVID-19 dashboard collected <https://covid19.who.int/>

⁵ UN Geneva Charter on Sustainable Housing. “The definition of vulnerable groups and people varies from country to country and may include: young people; senior citizens; large families with children and single parent families; victims of domestic violence; people with disabilities including mental illness, intellectual and/or physical disabilities; immigrants; refugees; Roma communities; and other minor groups”. Available at https://unece.org/DAM/hlm/charter/Language_versions/ENG_Geneva_UN_Charter.pdf.

Figure 1. Real GDP growth estimate in UNECE member States



Source: UNECE, 2021, based on data from the IMF World Economic Outlook Database October 2020 estimates, showing the annual real GDP growth estimate measured by annual per cent change

Urban economic resilience is heavily tied to quality of governance and the capacity to meticulously plan and manage resources to reduce inequality faced by lower-income groups. Governments, both national and local, must engage households and communities, paying particular attention to specific concerns of urban vulnerability, including informal workers, migrants, children, women and ageing population groups.

The challenge to recovering better is shaping policies and regulations such that optimized sustainable development (social, economic and environmental) does not hinder innovative and creative solutions. This regional policy brief addresses the dynamics of risk facing the urban socio-economic sector as well as the crucial role of urban economic resilience in recovering better and leaving no one behind.

This regional policy brief was prepared in the framework of the UNDA project “Building urban economic resilience during and after COVID-19” (See a summary of the description in Box 1). The project is aimed to enhance social protection during the pandemic response, particularly by strengthening urban economic resilience policies during and after COVID-19, focussing especially on vulnerable populations.

Box 1. About the UNDA project on “Building urban economic resilience during and after COVID-19”⁶

The project focuses on strengthening the capacities of local governments in sixteen cities globally: three from each of the regions of Africa, Western Asia, Europe and Latin America and four from the Asia-Pacific region. They have been selected on a demand-driven approach to design, implement and monitor sustainable, resilient and inclusive COVID-19 economic and financial responses, recovery and rebuilding plans.

⁶ More information is available at the UNECE website and the UNDA 13th project website <https://unece.org/housing/urban-resilience-after-covid19>. <https://urbaneconomicresilience.org/>.

The immediate impact of the project will be the provision of good global practices from other cities. The project contributes to a better understanding of the key factors and drivers of urban resilience and establish a practical framework for creating more resilient cities and local governments better able to withstand crises likely to occur in a predominantly urban world.

The UNDA 13th project has four main activities: (1) Development of a global urban economic recovery and resilience diagnosis and planning tool for the sixteen pilot cities; (2) Development of an online training programme and organization of global, regional and local training workshops; (3) Support to pilot cities in preparing economic recovery and resilience plans; (4) Provision of an advice on possible funding sources for economic development and infrastructure projects in support of economic recovery.

This policy brief aims to position urban economic resilience as a forward-looking and action-oriented plan that promotes recovery during and after COVID-19.

The policy brief complements and builds upon the existing [UN Response to the COVID-19 pandemic](#) in addition to three relevant United Nations policy briefs on the ongoing global COVID-19 outbreak:

- 1) [Recover Better. Economic and Social Challenges and Opportunities](#)
- 2) [COVID-19 in an Urban World](#)
- 3) [Responding to the socio-economic impacts of COVID-19.](#)

The pivotal role of digitalization in emergency responses during and after the pandemic has pushed many cities in the UNECE region to promote use of digital technologies and approaches to building smart sustainable cities. The regional policy brief therefore builds on the experience of applying the [UNECE/ITU Key Performance Indicators for Smart Sustainable Cities \(KPI4SSC – see Box 2\)](#) in the preparation of smart sustainable city profiles⁷ (ECE/HBP/188⁸) and the preparation of Smart Sustainable Cities Profiles which were developed by UNECE for the cities of Grodno (Belarus), Nur-Sultan (Kazakhstan)⁹, Bishkek (Kyrgyzstan), Tbilisi (Georgia) and Podgorica (Montenegro) within the UN Development Account (UNDA) 12th Tranche project, “[Smart Sustainable Cities for the 2030 Agenda on Sustainable Development and the New Urban Agenda in the UNECE region](#)”.

The regional policy brief is also based on the [Geneva Declaration of the Forum of Mayors](#) (see Box 2) which was endorsed by the first Forum of Mayors convened by UNECE on 6-8 October 2020 in Geneva, Switzerland. The forum's overall theme was “City action for a resilient future: Strengthening local government preparedness and response to emergencies and the impact of disasters and climate change” (ECE/HBP/205¹⁰, see Box 2 below).

⁷ The sustainable smart city profiles are elaborated using the evidence-based approach. See the approach in the UNECE/UN-Habitat Guidelines on evidence-based policies and decision-making for sustainable housing and urban development. <https://unece.org/housing-and-land-management/publications/guidelines-evidence-based-policies-and-decision-making>.

⁸ UNECE Report of the Committee on Housing and Land Management on its seventy-seventh session, ECE/HBP/188. https://unece.org/DAM/hlm/documents/2016/ECE_HBP_188.en.pdf.

⁹ Smart Sustainable Cities Profile Nur-Sultan (Kazakhstan) <https://unece.org/housing/nursultan-cityprofile>.

¹⁰ UNECE Annotated provisional agenda for the eighty-first session, ECE/HBP/205. https://unece.org/DAM/hlm/documents/2020/ECE_HBP_205-E.pdf

Box 2. UNECE Forum of Mayors¹¹

The UNECE Forum of Mayors is a collaborative platform provided at the United Nations level which brings together cities and other stakeholders to discuss sustainable development. The dialogue among cities was launched in 2019 as the “Day of Cities”, when fifty mayors and deputy mayors came to Geneva to share best practices and discuss a new vision for urban sustainability. The UNECE Committee on Urban Development, Housing and Land Management at its 80st session in 2019 agreed to dedicate one of the three days of the 81st Committee session to discussions concerning, and involving the participation of, local authorities, in particular mayors, following a similar format to the “Day of Cities”. The First Forum of Mayors then was organized on 6 October 2020. This event has successfully demonstrated the importance of opening the multilateral stage to urban leaders as key agents of change in the new international architecture of policymaking and combating global challenges. In response to the COVID-19 outbreak, the 2020 theme of the Forum was “city action for a resilient future: strengthening local government preparedness and response to emergencies and the impact of disasters and climate change”. The Forum of Mayors allows cities’ experiences, needs and challenges to define the UNECE agenda so it can provide direction to member states through its practical work as well as the negotiation of milestone documents such as the Geneva UN Charter for Sustainable Housing. UNECE also encouraged the mayors to be part of its voluntary global campaign, “Trees in cities challenge”, whereby mayors can make a pledge to plant trees to combat climate change and foster urban sustainability and resilience.

The regional policy brief further supports the implementation of the [Geneva UN Charter on Sustainable Housing](#) as well as the [Housing 2030](#)¹² Initiative and the draft “Place and Life in the UNECE – A Regional Action Plan 2021-2030”. The draft Regional Action Plan 2021-2030 is expected to be endorsed at the eighty-second session of the UNECE Committee on Urban Development, Housing and Land Management in October 2021.

The regional policy brief is also based on key lessons from the UNECE publication, (ECE/INF/2020/3) [People-Smart Sustainable Cities](#)¹³, prepared within the [Sustainable and smart cities for all ages](#)¹⁴ nexus advocating a “cities-based” approach to sustainable development (see Box 3).

Finally, the policy brief incorporates lessons learned from the three pilot projects whereby the UNECE supported economic and social recovery from the pandemic in Bishkek (Kyrgyzstan), Kharkiv (Ukraine) and Tirana (Albania), under the UNDA 13th Tranche project, [Building Economic Resilience after COVID-19](#).

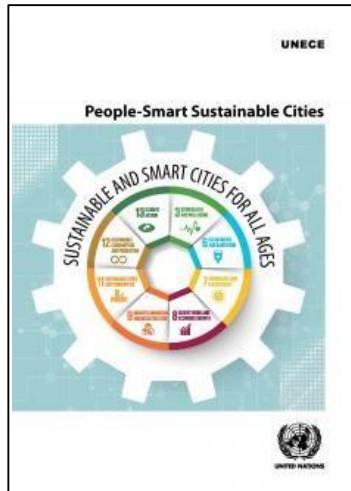
¹¹ UNECE Forum of Mayors. <https://unece.org/forumofmayors>.

¹² Housing 2030. *Effective policies for affordable housing in the UNECE region*, the document and further information together with links to UNECE and UN-Habitat websites are available at: <https://www.housing2030.org/>

¹³ (ECE/INF/2020/3) UNECE ‘People-Smart Sustainable Cities.’ Geneva, 2021. Available at https://unece.org/sites/default/files/2021-01/SSC_per_cent20nexus_web_opt_ENG_0.pdf

¹⁴ UNECE ‘Sustainable and Smart cities for all ages.’ Available from <https://unece.org/sustainable-and-smart-cities-all-ages>

Box 3. People-Smart Sustainable Cities¹⁵



The UNECE publication “People-Smart Sustainable Cities”, prepared within the “Sustainable and smart cities for all ages” nexus of UNECE, advocates a “cities-based” approach to sustainable development. The publication highlights that, as during the financial crisis of 2008, the COVID-19 pandemic has shown the different capacities of cities to cope with crises. Both the pandemic and the economic crisis caused by lockdown measures have disproportionately affected cities and population groups, with the most vulnerable groups suffering the most. The “cities-based” approach to sustainable development recognizes the central role of cities and urban living in sustainable development. As a dominant form of spatial organization, cities are the centerpiece of economic, social and cultural life. Without localizing Sustainable Development Goals (SDGs) at the urban level, few of them can be effectively addressed. By nature, cities

represent a complex arrangement of many interrelated systems, both social and technical, so that they are best placed to address the implementation of multiple SDGs. Cities also offer rapid, practice-informed and grounded responses to sustainability challenges.

This Regional Policy Brief contains an **Introduction**, two **Parts** and **Conclusions**.

- **Introduction** addresses impacts of the COVID-19 pandemic on cities This and other chapters are further broken down into four thematic sub-chapters:
 - i) Urban governance
 - ii) Socio-economic impact of the pandemic
 - iii) Nature-based solutions and climate neutrality
 - iv) Urban planning and transportation.
- **Part I** addresses challenges resulted from the pandemic and existing policy responses from the cities
- **Part II** formulates proposals for the most effective policy responses by cities and highlights examples of innovative policies implemented by cities in the UNECE region to respond to the pandemic.
- **Conclusions and Recommendations** outline priority actions for building urban economic resilience during and after COVID-19 in the UNECE region.

¹⁵ UNECE People-Smart Sustainable Cities, 2021. Available at https://unece.org/sites/default/files/2021-01/SSC_per_cent20nexus_web_opt_ENG_0.pdf

Introduction

The impact of the COVID-19 pandemic on cities in the UNECE region could be described as follows:

- Urban governance. The COVID-19 pandemic has had an extraordinary impact at all levels of urban governance and highlighted the relevance of governance policies, regulations and digital services. All countries in the UNECE region have enacted measures to proactively contain the pandemic. Emergency administrative structures have been activated, striving to tailor their response to the complexities of their country context. Governance interventions have focused on movement restrictions and social distancing, with many countries providing economic and fiscal support for citizens.
- Socio-economic situation in cities. The crisis has had a devastating socio-economic impact in cities, particularly on household inequality and financial, liquidity and solvency concerns for small and medium enterprises. These can be broken down as follows:
 - Household inequality: the impact of national lockdowns during 2020-2021 has been highly regressive, with poorest households hit most severely. The pandemic induced an economic crisis, powerfully affecting the livelihoods of informal settlements and workers. The UNECE Statistic Division preliminary indicators on UNECE regional unemployment suggest that the impact on households is likely to be exceptionally high¹⁶.
 - SMEs' financial, liquidity and solvency concerns: SMEs, tourism and the creative industry have suffered a significant impact on their business operations and balance sheets, with job loss falling among the most immediate consequences. Economic contraction and job destruction have been most significant among informal settlements and their inhabitants as well as informal workers. In economies in transition, most SMEs are in the informal sector. Supporting and enabling this sector is vital to drive economic growth. Feedback on financial, liquidity and solvency indicators, businesses and SMEs is expected to fare well on two key debt-burden indicators i.e., liquidity and solvency, during and after the COVID-19 pandemic. National economies and economies in transition are poised to recover from the COVID-19 pandemic and resulting socio-economic crisis. However, this will depend crucially on the formal economy, SMEs' liquidity risk in the short term and their ability to undertake quality investments in physical and human capital to boost future growth.
- Environment. Lockdowns may have a short-term, positive impact on our environment, especially in terms of emissions and air quality; however, these effects are likely to be temporary. Figure 2 shows the improvement of air quality in Madrid from the pre- to post-lockdown period. As pandemic impact and response measures have significant short and long-term effects on economic activity, it is important that nature-based solutions and climate neutrality are included in recovery packages.

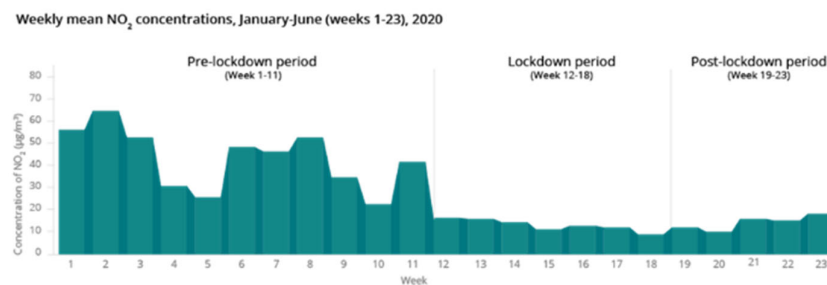
¹⁶ UNECE Statistic Division "COVID-19 and official statistics".

<https://statswiki.unece.org/display/COV/Support+for+managing+the+crisis#Supportformanagingthecrisis-Country>.

- Urban planning and transportation. The COVID-19 pandemic has severely disrupted urban life, with large numbers of people affected by stay-at-home orders and reduced use of urban transport. Moreover, use of urban transport itself has experienced transformations, with greater numbers of people opting for transport by foot or bicycle over transportation by private vehicle.

In the above context, urban planning principles that promote sustainability and equitability are essential to cope with the current pandemic and prepare for future crises. The pandemic has shown the need for all human settlements to take a comprehensive and holistic approach to urban planning, taking local contexts into account while recognising the connection between households and communities to urban and peri-urban systems.

Figure 2. European Environment Agency. Madrid Air Quality, January – June 2020¹⁷



Part I. Challenges and Policy Responses to the COVID-19 Pandemic

The COVID-19 pandemic has demonstrated the extent to which different socio-economic concerns, sustainability and resilience are interconnected. The pandemic’s socio-economic consequences have disproportionately affected most vulnerable groups while highlighting interlinkages between socio-economics and sustainable development. This chapter focuses on analysis of challenges caused by the pandemic and cities’ policy responses in the four areas of urban economic resilience in cities within the UNECE region:

- 1) Urban governance
- 2) Socio-economic impact of the COVID-19 pandemic
- 3) Nature-based solutions and climate neutrality
- 4) Urban planning and transportation.

Urban governance

According to the Governance and Social Development Resource Centre¹⁸ (GSDRC), “urban governance” refers to how all levels of government, along with other stakeholders, decide how to plan, finance and manage urban areas. The pandemic, together with its resulting health and socio-economic implications, has reacquainted communities with the vital importance of local government in providing public resources and contributing to the development of urban resilience.

¹⁷ European Environment Agency. “Policy Brief: COVID-19 and Europe’s environment: impacts of global pandemic”. Available at <https://www.eea.europa.eu/publications/covid-19-and-europe-s/covid-19-and-europes-environment>.

¹⁸ GSDRC: Urban governance <https://gsdrc.org/topic-guides/urban-governance/concepts-and-debates/what-is-urban-governance/>

Beyond health effects, the economic impact of COVID-19 has led to severe unemployment in cities, leading to reduced revenue for municipal governments¹⁹.

The COVID-19 pandemic affected negatively economic and financial urban governance systems. Based on this experience, only resilient urban governance systems can create viable post-COVID-19 national recovery strategies. Municipal finance is an essential part of sustainable development and recovery plans. Local governments lead the COVID-19 responses in the UNECE region and globally and stand on the front line of citizen engagement, service delivery and management of public space. Every preventive and containment measure requires resources and has a fiscal aspect. To finance their pandemic response, local governments rely on three major sources: their own revenues, intergovernmental transfers and subnational borrowing.

They must use these to address the following challenges:

- **Increased demand for municipal services to address consequences of the pandemic.** Rapidly changing domestic and international conditions are increasing the demand for municipal services to respond adequately to the pandemic's socio-economic challenges. This will require innovative policies at the strategic level and improved service delivery systems at the operational level. Creativity and flexibility in recovery response will be vital.
- **Need to ensure provision of core municipal services to the population.** Government and public administration will continue to fulfil critical functions in development, economic growth measures, social protection, reducing poverty and illiteracy and other social development activities.
- **Ensuring people-oriented governance to support people to adapt to the post-COVID environment.** To shape the post-recovery future, governments and public administration need to establish a dynamic, people-oriented system. This would be done by strategic restructuring, transparency, participation and engagement allowing public employees to perform at their best and adapt to the changed economic and social environment.

Box 4 below provides an example of the policy response in the City of Barcelona (Spain) to urban governance challenges during COVID-19. The Barcelona Deal (Box 4) provides lesson on how urban governance response is fundamental to supporting economic and social recovery for all inhabitants, as well as enabling input from all relevant stakeholders.

Box 4. The Barcelona Deal: Building a city-wide consensus to guide the COVID-19 recovery²⁰

The 'Barcelona Deal' (Pacte per Barcelona) emerged from the realization that the magnitude of health, social and economic crises created by the COVID-19 pandemic will require bold new approaches based on a vision of the city's future shared by a wide range of citizens and local communities. Barcelona's previous participatory governance mechanisms typically required passing municipal laws to decide who can take part in participatory councils; these ultimately proved too inflexible to meet the speed and scale of the current crisis. In contrast to these slow and rigid decision-making structures, the Barcelona Deal developed a flexible, participatory mechanism without need to change current laws or norms.

¹⁹ United Nations. (July 2020) Policy Brief: COVID-19 in an Urban World.

https://www.un.org/sites/un2.un.org/files/sg_policy_brief_covid_urban_world_july_2020.pdf

²⁰ Barcelona Deal (Pacte per Barcelona). <https://www.lse.ac.uk/Cities/Assets/Documents/EGI-Publications/PB01-EN.pdf> -

<https://pacteperbarcelona.decidim.barcelona/assemblies/pacteperbarcelona>

To manage the complexity of coordinating this ambitious stakeholder engagement and dividing traditional policy subdivisions, the overall task of developing a recovery roadmap was broken down into a “main table” as well as five thematic working groups. These were economic recovery, digital economy, urban model and social rights and culture, education, science, international and sports working groups. Working groups on these topics encouraged the involvement of a larger number of stakeholders who could contribute to thematic areas concerning their interests and expertise.

Socio-economic challenges resulting from the COVID-19 pandemic

Local governments are at the frontline of the COVID-19 pandemic. Local governments' capacity to respond rapidly and effectively depends on their financial situation as well as their budgetary and political authority.

During the pandemic, households and businesses in need of social protection have been the main priority of UNECE Member States' policy response. This section focuses on the socio-economic challenges faced by households, SMEs and the public sector.

Households

The global nature of the economic shock, with a simultaneous collapse in both supply and demand, calls for the first truly global fiscal stimulus in history. Channeling this only to SMEs and workers will only shore up supply – policymakers must also protect household incomes to ensure demand.

In addition to household income, the pandemic has highlighted the need for adequate housing. The most fundamental piece of health advice has been to “stay at home”. As Ms. Leilani Farha, UN Special Rapporteur on the right to adequate housing, stated, “housing has become the frontline defense against the coronavirus. Staying at home has rarely been more of a life-or-death situation²¹”.

The following list summarizes household challenges revealed by the pandemic:

- **Urban inequalities.** Global supply chains make cities vulnerable to disruptive events. The COVID-19 pandemic has shown the reality of urban inequalities such as overcrowding; such challenges render containment of the pandemic more difficult and create opportunities for further spread of the virus.
- **Socio-economic impact.** Current economic structures increase vulnerability. The most vulnerable groups are disproportionately affected by the pandemic's socio-economic effects. Enforcing lockdowns, social distancing and other protective measures is an economic challenge for households, businesses and SMEs, especially the informal economy and informal settlements.
- **Inadequate and informal housing.** About 1.6 billion people globally occupy inadequate housing, including many in the UNECE region - 50 million people in the UNECE region live in informal settlements²². The pandemic has exacerbated health-related challenges and socio-

²¹ OHCHR (2020). “Housing has become the front-line defense against the coronavirus. Home has rarely been more of a life-or-death situation.”

²² UNECE (2020). “Guidelines for the formalization of informal constructions,” Geneva. It is available from https://unece.org/DAM/hlm/documents/Publications/Technical_guidelines_informal_settlements.EN.pdf

economic instability for these groups. Throughout the UNECE region, there is a lack of adequate, affordable housing for vulnerable groups, which needs to be addressed.

- **Enhanced sense of community.** Strengthening a sense of community is critical for improving community response and addressing vulnerable groups' needs.

Box 5 shows **the policy response adopted by the UNECE member States on household fiscal measures** during COVID-19.

Box 5. Examples of some of the household fiscal measures in the UNECE region during the COVID-19 pandemic. Sources: International Monetary Fund (IMF) policy responses to COVID-19²³

Austria. The total fiscal package announced on 15 March amounts to €38 billion (about 9.5 per cent of 2019 GDP). From 2nd April, households could delay rent payments to their landlords until the end of 2020. Households and SMEs may also delay their debt servicing by 3 months.

Belgium. The government put in place a package of fiscal measures to address the crisis, detailed in its 2021 Draft Budgetary Plan and a March 2021 Monitoring Committee report, with an estimated budget impact of €17.5 billion (3.9 per cent of GDP) in 2020-21, and complemented by some €52 billion (about 12 per cent of GDP) of loan guarantees. Household measures taken by the Belgian authorities include a suspension of debt servicing to banks and insurers by all households and companies affected by the crisis until the end of June 2021 and March 2021, respectively.

Bosnia and Herzegovina. In 2020, Bosnia and Herzegovina deployed substantial resources to mitigate the adverse effects of COVID-19 and support the economy and households. Total support to households and firms amounted to KM 603 million (or 1.9 per cent of GDP).

Bulgaria. Key household fiscal policy responses for 2020 and planned for 2021 included the following revenue measures:

- i. Tax relief for households with children with disabilities (BGN 143 million).
- ii. Reduced VAT rate of 9 per cent for restaurant services, books, baby food, wine, beer, tour operators and tourist trips, gyms and sports facilities and food delivery until the end of 2021 (BGN 343 million).
- iii. VAT and customs duties relief for the import of key medical supplies (BGN 3 million).

Cyprus. Cyprus has implemented an economic support package estimated at €800 million (3.8 per cent of GDP) in 2020 for the health sector, households and businesses. The package includes:

- i. €40 million in support for the health sector to combat the pandemic.
- ii. Income support for households, including leave allowance for parents and those with health issues.
- iii. Wage subsidies for affected businesses to maintain jobs, grants to small businesses and self-employed people, support for the tourism sector, a two-month deferral of VAT payments and a temporary VAT cut to stimulate the hospitality sector.
- iv. A three-month suspension of the scheduled increase in contribution to the General Healthcare System and interest subsidy for new business and housing loans for four years, which benefits both businesses and households.

²³ International Monetary Fund 'Policy Responses to COVID-19.' 2021.

<https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>.

Iceland. The Iceland Parliament approved an array of fiscal measures to ease strain on households and firms and, looking forward, help the economy in its recovery. Key measures to support households and firms include:

- i. Tax cuts, deferrals and loss offsets.
- ii. Increased unemployment benefits, child allowances, quarantine grants, subsidies and state contributions to firms' dismissal costs to prevent bankruptcies of viable firms and protect workers' rights.
- iii. Incentives for the employment of individuals with more than 12-months in unemployment.
- iv. Early pension withdrawals.
- v. State-guaranteed loans to companies.

Small-Medium Enterprises (SMEs)

National government-imposed restrictions to contain the spread of COVID-19 include lockdowns, quarantines, social-distancing measures and limitations on social movement. A result of this has been a dramatic drop in revenue for small-medium enterprises (SMEs), thereby increasing the unemployment rate. SMEs are strongly represented in the tourism, creative and fashion industries, which have been significantly affected by pandemic-containment measures, as well as in food, where short delivery time is essential.

Given the specific circumstances SMEs and the self-employed faced through the pandemic, UNECE member States instituted measures to support them, with a strong focus on initiatives to sustain short-term liquidity.

The following list summarizes **policy measures specific to SMEs** in the UNECE region.

- **National or regional loan guarantees.** Several UNECE Member States have introduced, extended, or simplified loan guarantees to enable commercial banks to expand lending to SMEs.
- **National or regional public grants.** Several UNECE Member States have provided grants and subsidies to SMEs and other companies to compensate for the drop in revenue.
- **National or regional tax exemptions.** Many Member States have introduced deferral of tax, social security, debt and rent and utility payments to ease liquidity constraints. In some cases, tax relief or a moratorium on debt repayments has been implemented. Some countries are also relaxing measures for public procurement and late payments.
- **National or regional policies for SMEs.** Some countries are implementing structural policies to help SMEs adopt new working methods and technologies to find new markets so that operations can continue under containment measures. These policies aim to address urgent short-term challenges, such as introducing teleworking, strengthening SMEs' structural resilience and supporting further growth.
- **National or region-specific measures or packages for self-employed people.** Compared to employees, the self-employed are not insured for sick leave or unemployment. Countries have thus provided sick leave payments, unemployment benefits and lump-sum subsidies to the self-employed.

Box 6 provides cases studies on SME business environment policy responses adopted by seven UNECE member States during the COVID-19 pandemic.

Box 6. Business environment policy responses. (Source: IMF, 2021)²⁴.

Armenia. Expenditures for business support:

- i. Subsidized 2–3-year loans to provide short-term support to businesses and SMEs.
- ii. Direct subsidies to SMEs and businesses to help maintain their employees.
- iii. Grants to entrepreneurs and firms.
- iv. Lump-sum transfers to the vulnerable, including individuals unemployed after the COVID-19 outbreak, families with or expecting children, micro-businesses, people who need help with utility bills and those in temporary or part-time employment.

Bulgaria. Revenue measures:

- i. Reduced VAT rate of 9 per cent for restaurant services, books, baby food, wine, beer, tour operators and tourist trips, gyms and sports facilities and food delivery until the end of 2021 (BGN 343 million).

Expenditures for business support:

- i. 60/40 wage subsidy scheme (BGN 1019 million).
- ii. Support for artists who have been hit by the lockdown (BGN 5 million).
- iii. Tourism support (BGN 47 million).
- iv. Agricultural producers support (BGN 85 million).

Cyprus. Cyprus has implemented an economic support package that is estimated to amount to €845 million (4 per cent of GDP) in 2020 for the health sector, households and businesses. The package includes the following revenue measures:

- i. Wage subsidies for affected businesses to maintain jobs, grants to small businesses and self-employed people, support for the tourism sector, a two-month deferral of VAT payments and a temporary VAT cut to stimulate the tourism and hospitality sectors.
- ii. Three-month suspension of a scheduled increase in contribution to the General Healthcare System and a four-year interest subsidy for new business and housing loans for four years.

Georgia. Revenue measures:

- i. Tourist enterprises exempt from profits, equivalent to GEL 45 million in tax revenue.
- ii. Additional VAT refunds, equivalent to GEL 600 million in tax revenues.

Expenditures for business support:

- i. Credit guarantee scheme to help businesses cope with the pandemic: GEL 330 million.
- ii. Interest subsidy issued to help hotels meet banking obligations and co-finance up to 80 per cent of the annual interest rate on loans issued to family-owned, small and medium-sized hotels: GEL 70 million.
- iii. Support to agriculture: GEL 139 million.
- iv. Micro-grants to help SMEs: GEL 20 million.

Kazakhstan. Kazakhstan announced measures to restore economic growth including a subsidized mortgage programme for households, with a segment specifically targeting young people, tax incentives to agriculture and hard-hit sectors (civil aviation, tourism), credit support to SMEs and manufacturing enterprises via a newly created industry development fund and infrastructure development.

²⁴ International Monetary Fund ‘Policy Responses to COVID-19.’ 2021.

<https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>.

Expenditures for business support:

- i. Lowered risk weights: for SMEs from 75 per cent to 50 per cent, for foreign currency loans from 200 per cent to 100 per cent and for syndicated loans from 100 per cent to 50 per cent.

Malta. Malta announced a €900 million (7 per cent of GDP) package to help the economy recover from the pandemic.

Revenue measures:

- i. The extension of tax deferrals estimated at €200 million (1.5 per cent of GDP).
- ii. The extension of wage subsidy schemes
- iii. Tax refund for workers.

Expenditures for business support:

- i. Subsidies for rent and electricity bills for businesses.
- ii. Lower taxes for property transactions.
- iii. Cash vouchers redeemable at bars, restaurants, hotels and retail outlets.
- iv. Additional in-work benefits and grants.
- v. Various funds, grants and supporting schemes for businesses.

North Macedonia. North Macedonia has adopted fiscal measures to help address SMEs' liquidity problems, protect jobs and support the most vulnerable.

Expenditures for business support:

- i. Subsidies on private-sector wages and social security contributions for firms that maintain employment, postpone income tax payments, loans at favourable terms and loan guarantees and sector-specific support.

Labour Market Conditions for SMEs

The COVID-19 pandemic has had a multi-dimensional impact on society and citizens, with the immediate effects of the socioeconomic crisis felt in the labour market. This section focuses on the challenges for labour market policy response during the pandemic.

The International Labour Organization (ILO) is a United Nations agency which sets labour standards, develops policies and devises programmes promoting social justice. Their report, "COVID-19: Public employment services and labour market policy response", published in August 2020, addresses the impact that the COVID-19 public health crisis is likely to have on the UNECE region and international labour market²⁵.

The following list **summarizes labour market policy measures of SMEs in the UNECE region.**

- **Vulnerable groups.** Informal workers and the rural poor are at greater risk due to inadequate access to social protections. Urban informal workers have been significantly affected by lockdown and quarantine measures; however, the medium- and long-term impact on urban jobs and earnings will depend on government policy responses. Migrant workers contribute significantly to the economies of the UNECE region and are increasing in terms of their proportion of the total workforce of the region²⁶. In the European Union, member states estimated that 2.4 million immigrants entered the EU-27 from non-EU-27 countries in 2018. These were often migrants working in the informal economy, with limited job security and

²⁵ ILO 'Policy Brief: COVID-19: Public employment services and labour market policy responses.' 2020. It is available from https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_753404.pdf.

²⁶ Eurostat.

often lacking legal status. Women represent a large share of informal workers in the UNECE region and are more likely to be in low-paid and vulnerable employment positions. Women migrant workers are also more likely to lose their job and income.

- **We are staying safe.** Solving the health crisis is an essential precondition for solving the economic and socioeconomic crisis in the UNECE region. Measures include large-scale testing, tracking and tracing, enhanced personal hygiene and continued physical distancing protocols.
- **Teleworking and digitalization.** For workers who do not need to be physically present at workplaces, working from home and teleworking may remain a viable way to ensure continued work without the risk of contracting the virus while commuting and working.
- **Rapid response to socio-economic impacts** is enabled through a combination of measured micro- and macroeconomic policies, adequate income support for all workers and the capacity to expand national job retention schemes rapidly.
- **Adapting employment services and making them more flexible.** Adaptations in employment services ensure that public and private employment services have well-developed digital services and platforms for staff teleworking arrangements.
- **Strengthened employment and social protection systems.** The COVID-19 pandemic has compelled numerous member States in the UNECE region to temporarily extend social protections to promote sustainable social protection mechanisms for all workers.

Box 7 below provides the example of Kyrgyzstan labour market policy responses during the COVID-19 pandemic.

Box 7. Kyrgyzstan labour market policy responses. (Source: ILO Rapid assessment of employment impacts of the COVID-19 pandemic in Kyrgyzstan²⁷).

In response to COVID-19, the Kyrgyz Government developed policy packages in March, May and August

2020. In addition to a health sector contingency plan, the focus of policies has been on stimulating the economy and supporting enterprises, particularly by increasing liquidity. This has included the deferral of tax payments, temporary exemption of land and property taxes, subsidized credit lines for SME funding, simplified access to credit, financial mechanisms to support exporters, adjustments to procurement contracts and measures to manage inflation and the exchange rate, among others.

Nevertheless, less action has been noted to protect jobs, workers and incomes. Early measures included the prohibition of the dismissal of workers and employees without valid reasons, a request that work arrangements be adapted, temporary price controls on essential food items and food distribution to low-income families. In August, the Government outlined provisions to expand income and livelihood support through the simplification of procedures for unemployment benefit payments, greater temporary financial support to families with children under 16 years of age and one-time loans to low-income families for business or farm development.

These measures are much needed but may not be sufficient to address Kyrgyz labour market challenges. Lower economic activity will likely increase inactivity, unemployment, underemployment and the number of informal workers, particularly in high-risk sectors, while return migration is likely to increase labour supply, threatening living standards and socio-

²⁷ ILO (2021). https://www.ilo.org/wcmsp5/groups/public/---europe/---ro-geneva/---sro-moscow/documents/publication/wcms_761673.pdf

economic development. Moreover, employment impacts will be uneven and some of the workers most at risk, including women, youth, migrants and informal workers need special attention.

Summary of policy response measures

Policy pillar	Policy measure
Economy and employment	Health sector contingency plan. Fiscal policies such tax and rent relief and exemptions, including for SMEs. Mobilization of foreign aid. Subsidized credit lines and simplified access to credit. Changes to public procurement processes. Temporary price controls on essential food items. Negotiations with trade partners for freight transport. Financial mechanisms to support exports. Measures to manage inflation and the exchange rate.
Enterprises, jobs and incomes	Food distribution to low-income families. The government agreed to compensate 60 per cent of workers' salary, who participated in the Social Security Scheme, and had their work suspended during May and June 2020.Simplification of procedures for unemployment benefit payments ²⁸ . Financial support to families with children under 16 years of age. Automatic extension of the standard one-year enrolment term for beneficiaries of poverty-targeted cash transfers. One-time loans to low-income families for business or farm development in support of self-employment. Assistance to business continuity such as restrictions on on-site inspections.
Protecting workers in the workplace	Request that work arrangements be adapted. Managers and heads of medical organizations should be under 65.

SMEs' Financial Stability, Liquidity and Solvency

This section documents the unprecedented scope of the policy response undertaken by UNECE member States. The pandemic has profoundly impacted SMEs' access to financial resources. In particular, the dramatic drop in revenues has created acute liquidity shortages, threatening the survival of many businesses.

Governments took unprecedented rapid action to help businesses survive the crisis, much of it devoted to SMEs. Central banks in the UNECE region have also taken action to loosen monetary policy.

Liquidity support in the immediate aftermath of the COVID-19 crisis was delivered swiftly to many beneficiaries. In the recovery plans, it may be expedient to tailor these policies to SMEs most in need of support and invest in overarching urban economic resilience objectives. Examples include digitalization or environmental transition.

There is alarm that the liquidity crisis may turn into a solvency crisis for SMEs. In the UNECE region, many SMEs face reduced revenues for extended periods due to the COVID-19 pandemic,

²⁸ International Monetary Fund (2021). Policy Responses to COVID-19.

<https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>

coupled with an increased uptake of debt, often from public sources. While government support helps reduce acute liquidity constraints, many SMEs will likely struggle to repay their debts, especially if economic recovery is not well managed.

The following list summarizes SME-directed financial policy measures in the UNECE region.

- **Social protection.** Policy makers have adopted measures related to condensed working hours, temporary lay-off and sick leave, targeted directly at SMEs.
- **Tax deferment.** The magnitude of the lockdowns has adversely affected trade, business, consumption and employment throughout the region. UNECE governments have adopted measures related to tax deferral, social security, debt, rent and utility payments.
- **Loan guarantees.** The introduction, extension or simplification of loan guarantees enables commercial banks to expand lending to SMEs.
- **Public grants as a policy response.** The provision of grants and subsidies to SMEs and other companies aims to compensate for drops in revenue.
- **Liquidity challenges for SMEs.** Financial policy responses address pandemic-caused SME liquidity problems by expanding direct lending to SMEs through public institutions.

The Box 8 provides an examples and financial policy lessons learned by Croatia.

Box 8. Economic and financial governance – policy response in Croatia

(Source: IMF, 2021²⁹)

Croatia, the economic and fiscal policy response

The Croatian economy has been significantly affected by COVID-19, especially in consideration of its dependence on tourism and status as Italy's largest trading partner. Quarantine measures started early and were gradually tightened from border controls to the closure of schools, universities and open markets in addition to restrictions on intercity travel. Croatia quickly adopted 63 different economic measures with additional measures announced at the beginning of April 2020 to preserve jobs and alleviate the impact of the pandemic.

Timeline of policy responses: Key measures include:

- i. Deferment of public obligations
- ii. Zero interest on outstanding bank loans for three months, which can be extended by an additional three months if necessary.
- iii. Temporary suspension of payments of selected parafiscal charges.
- iv. Interest-free loans to local governments, the Croatian Health Insurance Institute, and the Croatian Pension Insurance Institute to cover the deferred payments.
- v. Subsidization of net minimum wages for three months to preserve jobs, which can be extended for another three months.
- vi. Early refund of taxes for individuals.

On 1 April 2020, the government announced additional measures, including:

- i. Increase of the subsidization of the net minimum wage.
- ii. Reduction or elimination of tax obligations of companies depending on their turnover and loss.
- iii. Suspension of VAT payments until payment is received from customers.
- iv. Extension of deadline for the 2019 financial reports until 30 June 2020.

²⁹ International Monetary Fund (2021). Policy Responses to COVID-19.

<https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>.

EU SURE is emergency temporary funding source to mitigate unemployment risks and is considered to be an additional financing and budget support source. On 25 June 2020, the government announced a short-term work programme financed by EU SURE to safeguard jobs. In turn, employers in need of introducing shorter working hours due to a decline in business activities would be entitled to aid for the payment of a part of their workers' wages. The measure is intended for all sectors and for all businesses with more than ten employees. On 7 September, the measures designed to help the economic sectors hit by the coronavirus crisis, including those designed to keep jobs and ensure liquidity and COVID-19 loans, were extended until the end of the year.

Nature-Based Solutions and Climate Neutrality

As the world faces the COVID-19 pandemic crisis, climate change remains a major hazard to people survival. The socioeconomic impact of the pandemic has exacerbated environmental and climate-related challenges that must be addressed by human settlements. Cities also face natural hazards, both climate-related, such as heatwaves, droughts, flooding and rising sea levels, as well as geological, such as earthquakes and volcanoes.

Building urban economic and environmental resilience to these hazards must be an integral part of sustainable development and should be reflected in recovery plans. The International Union for Conservation of Nature (IUCN) defines nature-based solutions (NbS) as “actions to protect, sustainably manage and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits”.

Nature-based solutions can address urban challenges exacerbated by the COVID-19 pandemic and the impact of climate change. NbS can be multi-functional, cost-effective and provide a wide range of benefits, from improving public health and reducing energy cost and pollution to regenerating urban spaces.

The following list gives some of the benefits of nature-based solutions and how they can support urban economic resilience during and after the pandemic. Box 9 provides the example the urban nature-based solutions of Poznan, Poland (Box 9).

- **Socio-economic impact.** First, it is important to evaluate possible negative urban ecosystem impacts of plan or policy. Following this, environmental factors can be used as an urban resilience tool to ensure that preparedness and response measures will enhance environmental health standards. For example, during lockdown, many people benefited greatly from having outdoor green spaces in which to enjoy socially-distanced contact and exercise.
- **Nature-based solutions are a tool for building urban economic resilience.** Nature-based solutions are increasingly used as a versatile and cost-effective way to build city resilience. Nature-based solutions promote access to urban nature - green and blue spaces that play a significant role in supporting health and well-being, for example in regulating city temperature and purifying air.
- **Urban challenges must use nature-based solutions and an evidence-based approach.** Policymakers should use scientific methods to address the usefulness of an urban ecosystem services approach, as well as its limitations. Analysis of the urban ecosystem spatial pattern can provide evidence-based arguments to implement urban economic resilience, benefitting people and nature, for example, through nature-based solutions that mitigate urban flooding hazards and other challenges to urban planning.

Box 9. Poznan: mapping and assessing ecosystem services to support decision making.

Source: The EU Repository of Nature-Based Solutions³⁰.

Poznan is Polish city with 482,000 permanent inhabitants (City Hall of Poznan, Department of Civil Affairs and Communication Permits, 2016) and an area of 262km². Although it has a rich and well-established green infrastructure that has been well preserved since the 1930s, green space remains scattered across the city. At the same time, Poznan faces urbanization pressure on open or green spaces and is confronted with decreasing population. Loss of inhabitants is particularly observed in the central districts characterized by a dense, built-up structure with limited green space and high population density. Particular challenges are faced in densely built-up areas with limited open and green space.

Urban regeneration policies aim to achieve the following:

- i. Systemic identification of areas with the lowest recreation ecosystem services capacity as places in need of transformation.
- ii. Calibrating such areas with areas of high demand for recreational services in terms of population size that could benefit from new green spaces or facilities.

The workflow process in the Poznan City consisted of 4 main phases:

- i. Initial phase, included identification of the city's activities in which ecosystem services mapping and assessment can be useful; data collection from different sources, including database of City public information data, topographical objects and digitalization of objects for analysis purpose.
- ii. Analysis phase, consisted of a selection of ecosystem services and indicators applied in the mapping and assessment process and a selection of tools and methods for data analysis.
- iii. Practical validation and application based on preliminary results of recreation opportunity spectrum selected. The locations for future greening have been verified in the field. The field visits allowed for validation of selected areas and improvements of mapping methods. In the result a final list of possible new green spaces and recreation facilities scenarios was proposed.
- iv. Synthesis phases project findings and conclusions were presented to the representatives of the project coordination and urban regeneration office in Poznan City Hall as a proposal for the further implementation.

There were 3 key issues crucial for the Poznan City:

- i. Understanding how data availability and quality determine the detail of the analysis.
- ii. Setting the model and analysis parameters as well as selecting classification method for results visualisation.
- iii. Selection potential sites for new green spaces, their validation in the field and selection of potential new green scenarios.

Urban Planning and Transportation

Urban and spatial planning is vital for integrating different urban sectors into a coherent spatial strategy. Urban design, sustainable and affordable housing provision, public transit and integrated infrastructural systems are planning considerations long acknowledged as principal instruments for sustainable cities.

According to UN-Habitat (2016), urban form is defined by density, centrality and city size. UN-Habitat also demonstrates that high-density monocentric urban forms and high-density polycentric

³⁰ Oppla, EU Repository of Nature-Based Solutions. <https://oppla.eu/casestudy/19236>.

urban forms offer the best balance of low transportation and infrastructure costs, low environmental impact and high income-generating abilities (UN-Habitat, 2016).

The impact of cities and urban design on urban resilience, the COVID-19 recovery plan and the global climate is becoming increasingly important. Cities represent a strategic element in overcoming challenges for a sustainable urban future in the wake of the pandemic. Therefore, COVID-19 recovery plans and climate change mitigation will require a combination of approaches, urban policy, building codes and regulations that will need to take all of these factors into account.

The following list summarizes urban planning challenges in building urban economic resilience during and after the COVID-19 pandemic.

- **Urban form and urban development policies** address urban resilience, organize land use and create objectives to provide a suitable living environment, urban economic resilience and climate change resilience. Urban development policies should
 - Promote compactness and maximize land efficiency.
 - Promote diverse and thriving communities.
 - Encourage walkable neighbourhoods.
 - Promote street connectivity.
 - Foster employment and local consumption.
 - Provide a diversity of housing that is adapted to local social needs.
- **Urban form compactness and density.** Compact cities control urban sprawl through development densification strategies. Where appropriate, they limit the footprint of urban areas in order to mitigate climate change, reduce disaster risks, protect natural open spaces and enable the affordable provision of basic urban services and easier access to social facilities. Designing neighbourhoods of adequate density through infill or planned extension strategies triggers economies of scale, reduces travel needs and the costs of service provision, and enables a cost-effective public transport system.

Cities are adapting urban design, reclaiming public spaces for citizens and rethinking location of essential urban functions to ensure easier access to urban services and amenities while securing safety and health for their residents. In the context of COVID-19, Box 10 provides the example of the city of Milan Adaptation Plan (May 2020) as an urban planning strategy.

Box 10. Milan Adaptation Plan during the COVID-19 pandemic, (May 2020)

(Source: Intelligent Cities Challenges EU)³¹.

The Adaptation Plan 2020 of Milan (Italy) manages the immediate emergency as well as the recovery phase by ensuring that service accessibility is accompanied by promoting flexible use of existing infrastructure and amenities. For example, by using school buildings during the summer to welcome people and make green areas more accessible.

Urban actions on public space and wellbeing: The goal of such actions is to reconquer urban public space.

³¹ Milano 2020 – Adaptation Plan (May, 2020)

[https://www.intelligentcitieschallenge.eu/sites/default/files/2020-05/Piero per cent20Pelizzaro_Milano per cent202020 per cent20- per cent20Adaptation per cent20plan_0.pdf](https://www.intelligentcitieschallenge.eu/sites/default/files/2020-05/Piero%20per%20Pelizzaro_Milano%202020%20per%20Adaptation%20plan_0.pdf)

Reactivation of parks, sports centres and facilities. Gradual opening of parks and public gardens by monitoring use and making safety agreements with sport organizations. The procedures to open pools and summer facilities need to be started and consent gained.

“Piazze Aperte” (Open Squares) in every neighbourhood. Develop large-scale tactical urban planning projects favouring pedestrian zones, especially in the vicinity of schools. These projects will also favour services in neighbourhoods with fewer green areas to facilitate physical activity and play areas for children.

Outside spaces for commercial activities and bars. Lower the city speed limit to 30km/h to allow additional space for restaurants and cafe table service on the roadside, further implementing parking slots.

Urban actions on mobility. The goal of such actions is to reduce movement and diversify mobility supply.

Limit public transportation. Signal systems to ensure safe distances and counting systems to determine the saturation level of public transportation.

Mobility Measures. Update policies on motor vehicle use to ensure effective traffic flows and traffic timing.

Open Roads programme. Create an infrastructure of pedestrian and cycling roads using only signals, low costs and short realization periods.

While COVID-19 has had significant impact on public transport systems, in most UNECE Member States, transport systems have shown a remarkable capacity to enforce hygiene and distance measures during national lockdowns. Nevertheless, significant challenges remain.

According to the 2020 McKinsey & Company report, “Restoring public transit amid COVID-19: What European cities can learn from one another”, estimates show an 80-90 per cent reduction in use of public transport services in many European countries³². Europe-wide fare revenue losses in urban and local public transport were estimated by UITP (International Association of Public Transport) to have reached approximately €40 billion by the end of 2020³³. Even as societies “re-open”, there is reluctance to use public transport, with many switching to private cars. Therefore, cities are faced with the emerging threat of being overwhelmed by road traffic with the implied sustainability challenges. Public transport providers are also affected by dramatic drops in revenue, potentially leading to severe funding problems.

The following list summarizes urban transportation challenges in building urban economic resilience during and after the COVID-19 pandemic.

- **Urban form from the transportation perspective.** The compact and dense urban form provides the following benefits from the urban transportation perspective:

³² McKinsey & Company. (2020) “Restoring public transit amid COVID-19: What European cities can learn from one another”. <https://www.mckinsey.com/industries/travel-logistics-and-transport-infrastructure/our-insights/restoring-public-transit-amid-covid-19-what-european-cities-can-learn-from-one-another>

³³ UITP, (2020) OPEN LETTER : European CEOs and city representatives call for local public transport to be a key sector in the European recovery plan, [https://www.uitp.org/sites/default/files/cck-focus-papers-files/PUBLIC per cent20TRANSPORT per cent20IS per cent20CRITICAL per cent20FOR per cent20EUROPEAN per cent20RECOVERY per cent20- per cent20FINAL per cent20VERSION.pdf](https://www.uitp.org/sites/default/files/cck-focus-papers-files/PUBLIC%20per%20TRANSPORT%20IS%20per%20CRITICAL%20FOR%20EUROPEAN%20RECOVERY%20-2020-FINAL%20VERSION.pdf)

- **Reduction of automobile dependence.** It has been found that as dwelling unit density increases above a certain threshold, automobile usage and total distance travelled by car per household decrease in favour of transit by walking and cycling^{34 35}.
- **Increased safety, social cohesion, commercial dynamism and pedestrian access to amenities.** Although there are many dimensions to urban design, increased intensity of human activity and public space can promote safer urban environments as well as economically dynamic trade and retail environments in a city centre³⁶. Higher residential population densities can create a critical mass for pedestrian access to parks and community facilities, such as markets, jobs, schools, hospitals and universities³⁷.

Box 11 (below) provides analysis on the impact of the COVID-19 pandemic on public transit funding needs in the U.S. from 2019-2021.

Box 11. The American Public Transportation Association (APTA): The impact of the COVID-19 pandemic on public transit funding needs in the U.S.

(Source: APTA³⁸)

The American Public Transportation Association (APTA) estimates that US transit agencies are facing an overall funding shortfall of \$48.8 billion between 2020 Q2 and the end of 2021. Nationally, transit ridership and fare revenues were down by 73 per cent and 86 per cent in April 2020 and April 2019, respectively. Decreased capital spending on public transport projects could also lose 37,000 construction jobs in 2020 and 34,000 jobs in 2021 due to project delays and cancellations. Quarterly transit revenue gaps are estimated to range between \$4.2 and \$8.1 billion through the end of 2021, even when the economy recovers. This will be due to constraints such as reduced capacity, disinfection costs, lower ridership rates and unemployment level forecasts.

Part 2. Proposed Solutions and Innovative City Responses to the COVID-19 Pandemic

The COVID-19 crisis has prompted cities to rethink how they deliver public services, plan public space and resume economic growth, with some cities already looking beyond the crisis to the recovery efforts that will be required following the pandemic. Cities have always been places of creativity and innovation, and local leaders are ensuring this will be the case once again.

³⁴ Miller, E., & Shalaby, A. (2000). *Travel in the Greater Toronto Area: Past and Current Behaviour and Relation to Urban Form*. [https://ascelibrary.org/doi/abs/10.1061/\(ASCE\)0733-9488\(2003\)129:1\(1\)](https://ascelibrary.org/doi/abs/10.1061/(ASCE)0733-9488(2003)129:1(1)).

³⁵ Kenworthy et al. (1999). *Patterns of automobile dependence in cities: an international*. <https://www.sciencedirect.com/science/article/abs/pii/S0965856499000063>.

³⁶ Jacobs, J. (1961). *The Death and Life of Great American Cities*. New York City. NYC: Random House.

³⁷ Churchman, A. (1999). Disentangling the Concept of Density. *Journal of Planning Literature* 13(4), 389-411. <https://journals.sagepub.com/doi/abs/10.1177/08854129922092478>.

³⁸ APTA, (May, 2020). <https://www.apta.com/wp-content/uploads/APTA-COVID-19-Funding-Impact-2020-05-05.pdf>

Some cities throughout the UNECE region have developed innovative policy responses to the COVID-19 crisis. This chapter analyses some of these innovative policies as lessons learned, with an emphasis on taking a holistic approach to multiple threats.

It should be noted that to be successful and impactful, proposed solutions should have three characteristics: they need to be comprehensive, people-centred, and share knowledge and a best-practices approach. These principles can be described as follows:

- **Comprehensive.** No single policy can alleviate the complete socio-economic impact of the COVID-19 pandemic. The best approach is therefore a comprehensive and coordinated set of policies and measures integrating specific needs from a socio-economic, governance, urban planning and environmental perspective.
- **People-centred.** The pandemic has exacerbated urban inequalities and problems within communities, especially for most vulnerable groups. Urban economic responses must be integrated into social and environmental policies aimed at promoting community and social well-being, reducing social inequality and leaving no-one behind.
- **Sharing knowledge and best practices.** Policies should encourage and embrace best practices and emerging social and financial innovations. The pandemic has highlighted issues related to governance, financial and socio-economic policies, well-being, health, culture and environment. Policies should allow for flexibility in approaching these socio-economic challenges.

Urban governance and digital transition

The COVID-19 crisis reinforces the need for a coordinated urban governance approach to digital transition. The use of digital governance tools has been a crucial lever in UNECE cities' response to the pandemic. They have been used to monitor contagion risk while simultaneously enabling continuity of key public services and economic activity. Digital governance tools and resulting policy changes will remain a permanent component of member states' recovery plans and increase decision-makers' preparedness for possible new waves. This process has prompted reflection on adequate ICT infrastructures in UNECE cities and access to internet services for communities with special regard to vulnerable groups.

In the UNECE region, local governance shows the need to reinforce digital transition. The pandemic has further accentuated the challenges remaining for vulnerable groups, informal settlements and informal workers. Although some digital divides have narrowed due to responses to the pandemic, others have not followed at an adequate pace, leaving some people behind.

The following list summarizes recommendations for urban governance policy measures on digital transition:

- **Digital transitions.** Information and communication technologies (ICTs) and the fourth industrial revolution offer new opportunities for managing cities more efficiently and holistically.
- **Focused, results-oriented governance digitalization platform.** Successful delivery systems focus on a limited number of well-defined priorities. It is critically important that governance digitalization does not lead to weak governance; therefore, a governance digitalization mechanism should have a well-defined mandate.
- **Simplified dashboards.** Whenever possible, KPIs should be built around existing indicators provided by member States' national statistics offices and city statistics offices during the

COVID-19 pandemic. All these should be used to create synergies with existing reporting structures, including those based on socio-economic indicators or reporting on national development recovery plans.

Socio-economic impacts of the COVID-19 pandemic

The impact of COVID has compounded existing socio-economic vulnerabilities and disproportionately affected vulnerable populations and minority groups, including 50 million people in the UNECE region living in inadequate housing. Low-income workers, who are less likely to have adequate savings or be able to telework, have also been severely hit by social distancing and closures in retail, transport, restaurants and other services.

The following list summarizes recommendations for socio-economic policy measures in the UNECE region.

- **Measures to support businesses with a focus on SMEs.** Securing workers' jobs and incomes by introducing or expanding support e.g., via training programmes for laid-off workers or those who have lost wages.
- **Measures to protect individuals and households.** Expanding income support to sick workers and their families, extending or easing access to unemployment benefits, supporting workers who cannot work from home, including by offering care options, easing access to targeted benefits or providing a one-off universal income transfer.

Box 12 provides an example of innovative solutions by the City of Bilbao (Spain) in response to the socio-economic impact of COVID-19, with an emphasis on vulnerable groups.

Box 12. Bilbao, Spain, (May 2020). Social Economic and Cultural Emergency Plan (Bilbao Aurrera). (Source: Bilbao Aurrera³⁹)

On 8 May 2020, the Bilbao City Council approved a Social, Economic and Cultural Emergency Plan, "Bilbao Aurrera", which aims, to alleviate, revive and provide recovery from the effects of the COVID-19 pandemic for citizens and SMEs. It provides an investment of €15 million and an array of over 50 measures. The plan was conceived and completed with consultation of political groups in the City Council in coordination with other institutions, directly affected sectors and relevant industries such as commerce, hospitality and culture, with whom several meetings have been held. This plan is in three specific areas: (1) Social Cohesion, over €2.2 million; (2) Economy and Employment, over €11.4 million; (3) Culture, over €1.3 million.

This is an exceptional and temporary set of measures to be implemented during 2020, the period considered to be most critical in terms of socioeconomic impact. All measures have been coordinated with those of other administrations. At the economic level, the plan will focus on sectors where the greatest impact is expected, such as small local businesses, hotels and restaurants, tourism and cultural and creative industries.

This range of actions has been drawn up under the intersecting principles of flexibility and capacity to adapt, search for greatest resource impact and striking a balance between investment and expenditure meeting people's needs while not losing the strength of strategic city

³⁹ Bilbao, Spain, (May, 2020). Social Economic and Cultural Emergency Plan (Bilbao Aurrera).

[https://www.bilbao.eus/cs/Satellite?language=en&pagename=Bilbaonet per cent2FBIO_home](https://www.bilbao.eus/cs/Satellite?language=en&pagename=Bilbaonet%20per%20cent2FBIO_home) - <https://www.citiesforglobalhealth.org/fr/node/903>

investments. It also includes increasing both internal and external digitalization, strengthening collaboration and participation with other institutions and cities (public-public and public-private) and maintaining the percentage of subsidies to the Development Cooperation for 2020. The aim of the plan is to enable continuation of work on other medium and long-term strategies that will help to overcome the current situation.

Nature-Based Solutions and Climate Neutrality

According to the World Health Organization (WHO) “Report on Global Urban Ambient Air Pollution (2016)”⁴⁰, more than 80 per cent of people in urban areas are exposed to pollution in excess of WHO limits. According to the latest urban air quality database⁴¹, 98 per cent of cities in low and middle-income countries do not meet WHO air quality guidelines. As urban air quality declines, health risks for the urban population increase.

Cities worldwide account for over 70 per cent of global energy use and 40 to 50 per cent of greenhouse gas (GHG) emissions⁴². Cities and the construction sector have been recognized as key components in energy-saving, improving sustainability and reducing GHG emissions.

The New Urban Agenda⁴³ (NUA) under paragraphs 44 and 121 recommends the strategic use of urban planning and building performance codes to achieve energy efficiency and sustainable growth. In many UNECE cities, heating and cooling represent up to half of the proportion of local energy consumption. Projected energy demand implies there will be increasing pressure on key energy infrastructures.

The urban “heat island effect” is a well-documented problem: as cities grow and are exposed to higher heat levels, heat levels continue to increase. Heat islands are caused by concentrated activity and energy use and artificial materials that trap and reflect heat. Heat does not dissipate as quickly at night in these urban areas as in a rural or natural settings. Heat islands also increase electricity demand and GHG emissions and create a negative feedback loop. Electricity demand during extreme heat events can also overload energy systems.

The following energy efficiency measures should be taken in building urban economic resilience during and after the pandemic:

- Urban resilience plans should address energy efficiency in urban areas, particularly in (public) buildings
- Urban resilience energy efficiency policies should provide urban planning and architectural guides to integrate energy modelling into the design process for new buildings and for re-developing existing buildings
- There should also be a financial mechanism to implement such guides.

⁴⁰ WHO (2016). Report Ambient air pollution: A global assessment of exposure and burden of disease. <https://apps.who.int/iris/bitstream/handle/10665/250141/9789241511353-eng.pdf?sequence=1>.

⁴¹ WHO (2021). Urban air quality. <https://www.who.int/data/gho/data/themes/topics/topic-details/GHO/ambient-air-pollution>.

⁴² UNEP (2017). Report: The Emissions Gap Report. https://wedocs.unep.org/bitstream/handle/20.500.11822/22070/EGR_2017.pdf.

⁴³ United Nations (2007). New Urban Agenda – Habitat III. <https://uploads.habitat3.org/hb3/NUA-English.pdf>.

Urban Planning and Transportation

Innovative cities reduce unnecessary regulatory barriers, ensure land supply and create supportive planning and zoning conditions for encouraging investment, e.g., in cleaner energy or quality affordable and sustainable housing. Land-use planning is important to prevent unsustainable or hazard-prone conditions. The [UNECE Protocol on Strategic Environmental Assessment \(SEA\)](#)⁴⁴, alongside several strategic UNECE transboundary agreements, provides frameworks for understanding and working on environmental impact and risk-management of proposed projects.

Energy-efficient urban designs offer an important tool that local governments can use to tackle this global problem. Compact cities are part of the solution: they allow planning and design to maximize accessibility to jobs, shops, social services and social activities by walking, cycling and public mass transportation (ESMAP, 2014)⁴⁵. The urban form is defined as the spatial dimension of cities. Therefore, urban form transformation is a complex project with a high social and economic cost.

The following list summarizes recommendations for innovative urban planning and transportation solutions in building urban economic resilience during and after the COVID-19 pandemic.

- **Urban form and environment.** Urban form and environmental considerations should assess the potential impact of climate change and prepare for the continuity of key urban functions during disasters or crises. A plan based on environmental conditions prioritizes ecologically valuable areas, such as agricultural land or a critical water stream.
- **Urban green spaces.** Urban green spaces provide multiple benefits and constitute a necessary feature of healthy settlements. Urban planning tools should provide urban forms and green spaces with accessibility. The benefits of urban green spaces can be maximized through adequate urban planning:
- **Urban planning.** Urban green spaces must be considered as a part of a comprehensive urban planning process and green infrastructure network. Urban greening interventions should be embedded in local planning frameworks and city master plans and be reflected in other sector policies, such as mixed-use (housing, job amenities), transport (energy and GHG emissions), health, sustainability and biodiversity.
- **Regulatory system.** Urban green spaces are most sustainable when supported and implemented by various sectors and stakeholders. Cross sectorial collaboration within local authorities, community groups and the private sector can help the interventions to deliver on multiple outcomes.
- **Civic engagement tools.** Planning and designing urban green space interventions should actively involve the local community and local residents. Further, they ensure community engagement and deliver interventions that serve the community's needs. Urban green space interventions are most effective when a dual approach is used, coupling a physical improvement to the urban environment with a social engagement and participation element promoting green spaces and reaching out to different local users.

Box 13 provides the example of Barcelona as an urban planning strategy for recovery during and after COVID-19.

⁴⁴ UNECE (2003). Protocol on Strategic Environmental Assessment (SEA).

<https://unece.org/fileadmin//DAM/env/eia/documents/legaltexts/protocolenglish.pdf>.

⁴⁵ The World Bank (2014). ESMAP “Planning Energy Efficient and Livable Cities”.

<https://openknowledge.worldbank.org/bitstream/handle/10986/21308/936780NWP0Box30ble0Cities0optimized.pdf?sequence=1&isAllowed=y>.

Box 13. Barcelona urban planning strategy for recovery during and after COVID-19.
(Source: EIB and Barcelona City Council⁴⁶)

Prior to 2020, the impact of climate change was a major factor in urban planning. COVID-19 added more challenges, especially on issues related to public health and dense city life. Public spaces need to be organized to allow people to socialise while keeping a safe social distance. In 2020, the European Investment Bank (EIB) approved a €95 million loan to help Barcelona complete approximately 40 projects focussed on climate action and social inequalities. The city will redesign streets to make more space for pedestrians and cyclists, improve energy efficiency in buildings and add more social, cultural and sports outlets.

Barcelona urban strategy – superblocks for better living. The urban strategy is designed to regenerate nearly 200,000 square meters of urban land and create “superblocks” that carve out large areas of car-free public space. The new urban public spaces will allow residents to get around quickly and safely while doing business more easily. The city will become more resilient in recovering from COVID-19, helping citizens follow social-distancing guidelines and recommendations. The key points of Barcelona's urban strategy superblocks are as follows:

- i. Pedestrians will be given priority in many parts of the city.
- ii. Low-speed zones will limit vehicle speed to 10 kilometres per hour.
- iii. Nurseries, schools, sports centres, a library and a care home will be built or renovated.
- iv. All new buildings will be designed to have nearly zero emissions.
- v. New bus lines and bicycle lanes will persuade people to keep their cars off city roads and reduce emissions.
- vi. A tree-planting programme is being accelerated.

⁴⁶ EIB Barcelona urban planning strategy for recovery during and after COVID-19.
<https://www.eib.org/en/stories/covid-19-urban-planning>

Conclusions and recommendations

The socioeconomic impact of the COVID-19 pandemic is without precedent. The public health crisis has evolved into a situation in which households, SMEs and workers are the most affected. Cities stand at the forefront of the pandemic's socio-economic impact on social inequalities, especially in regard to vulnerable groups. There is no one policy or action to tackle the complexity of the socioeconomic impact of the COVID-19 pandemic.

The regional policy brief recommends addressing four main themes with the aim of building urban economic resilience during and after the COVID-19 pandemic in the UNECE region. The four main points are governance, socioeconomic impacts, nature-based solutions and urban planning and transportation.

Although each of these is distinct in principle, they can be deployed synergistically to build urban economic resilience. Further, each of the four points are anchored firmly in the “recover better for Sustainable Development” framework, with SDGs forming the center of the long-term strategy.

The policy brief offers the following recommendations for cities and regional and national authorities:

- **Supporting and restarting the UNECE region's economies** should go beyond addressing emergency measures to include policies which expand productive capacities, boost economic resilience, promote economic diversification and create decent jobs.
- **Governments should ensure that COVID-19 pandemic recovery measures are focused on areas that can provide value creation for the community.** Job creation and sustainable city development with tangible actions for building urban economic resilience against the socioeconomic impact of the pandemic and climate crisis are both part of the problem and the solution. Such efforts must include funding for nature-based solutions, support for households, SMEs and workers, upgrading public and green spaces, accessible health, affordable housing, public transport and energy and water infrastructures.
- **Financial support for local and regional governments is a crucial part of the national stimulus and recovery measures during and after the COVID-19 pandemic.** Cities face an unprecedented crisis of funding with potentially disastrous results. Local and regional governments face much lower revenue and need emergency funding to build urban economic resilience during and after COVID-19.
- **Cities should build a strong relationship with civil society, SMEs and local businesses and communities and involve them in urban economic resilience, recovery plans and decision making.** Public consultation is vital to improve public policy initiatives and build citizen's trust and engagement.
- **Building urban economic resilience should be transformative and designed to trigger sustainable changes in cities in the UNECE region to support recovery.** Actions and planning at all levels of government must be geared toward sustainable development and consider ways for member states to recognize and institutionalize Volunteer National Reviews and Volunteer Local Reviews.
- **Cities need improved data collection in partnership with national statistical agencies.** Urban data and statistics are critical to the pandemic response and essential for urban economic resilience and the recovery plans in the framework of the 2030

Agenda. Data needs to be disaggregated at a sufficiently granular level to provide information on different geographical scales, including the urban and neighbourhood level while addressing inequalities, leaving no one behind.

- **Cities need to be active partners in collaboration across all levels of government.** Territorial and urban planning, as well as multi-governance and multi-stakeholder engagement, are essential and must include an approach for nature-based solutions that benefit from urban economic resilience and recovery plans for sustainable development.
- **All cities need to develop urban economic resilience and recovery plans,** fully integrated with other socioeconomic, environmental and urban planning actions using the technical, legislative and financial support of their national governments.
- **Nature-based solution and their enabling framework need to enter the mainstream across national policy frameworks.** The COVID-19 pandemic has demonstrated that one of the key preventive measures to safeguard public health is access to clean water. In addition to clean water and freshwater, urban public spaces, green spaces, city parks, urban forest and landscapes are vital for community health and wellness.
- **Companies and SMEs should continue to focus on retaining their core business** with survival as their main priority. Part of the COVID-19 policy response comprised rapid arrangements; therefore, many countries have committed to governance measures which support national economies during and after the pandemic.
- **Cities should introduce measures to link territorial and urban planning with urban economic resilience, cultural and natural resource planning** to respond to the socio-economic impact of COVID-19 and the climate crisis. **Urban planning principles are a tool for urban economic resilience.** Practically, local conditions should be adapted to:
 - i. Mixed urban land uses.
 - ii. High urban densities.
 - iii. Social structure of the population.
 - iv. Comprehensive land management and full integration between land use and transportation infrastructure planning.
 - v. The 2030 Agenda VNRs and VLRs.
- **Urban planning and urban design** should design the city following the territorial model and coordinate with neighbouring urban centres, considering the urban economy, local community, environment and territory.
- **Monitoring and reporting on policy implementation and results should be strengthened.** Monitoring and evaluation of urban economic resilience policies and decisions need to be in place to assess risks and plan for future scenarios. Capacity-building should be in place to ensure that regional and local planning fits this purpose.
- **Provide a networking platform where all levels of government, civil society, the private sector and other relevant stakeholders can engage in** developing and implementing urban economic resilience in recovery plans.

Bibliography

- Barcelona Deal (Pacte per Barcelona). Available at <https://www.lse.ac.uk/Cities/Assets/Documents/EGI-Publications/PB01-EN.pdf> - <https://pacteperbarcelona.decidim.barcelona/assemblies/pacteperbarcelona>
- Bilbao, Spain, (May, 2020). Social Economic and Cultural Emergency Plan (Bilbao Aurrera). Available at [https://www.bilbao.eus/cs/Satellite?language=en&pagename=Bilbaonet per cent20FPage per cent20FBIO_home](https://www.bilbao.eus/cs/Satellite?language=en&pagename=Bilbaonet%20per%20cent20FPage%20per%20cent20FBIO_home) - <https://www.citiesforglobalhealth.org/fr/node/903>
- Central Bank of Spain (Banco de España), 2021. “Economic and financial developments in Spain over the COVID-19 crisis”. Available at <https://www.bde.es/f/webbde/GAP/Secciones/SalaPrensa/IntervencionesPublicas/DirectoresGenerales/economia/Arc/Fic/arce110221en.pdf>
- Central Bank of Spain (Banco de España), 2020. Royal Decree-Law 6/2020, Royal Decree-Law 7/2020, Royal Decree 463/2020, Royal Decree-Law 8/2020, Royal Decree 465/2020, Royal Decree-Law 9/2020, Royal Decree-Law 10/2020 and Royal Decree-Law 11/2020 —provide initial measures to address the coronavirus (COVID) crisis. Available at https://www.boe.es/diario_boe/txt.php?id=BOE-A-2020-3434
- Churchman, A. (1999). Disentangling the Concept of Density. *Journal of Planning Literature* 13(4), 389-411. Available at <https://journals.sagepub.com/doi/abs/10.1177/08854129922092478>.
- European Environment Agency (2021). “Policy Brief: COVID-19 and Europe’s environment: impacts of global pandemic”. Available at <https://www.eea.europa.eu/publications/covid-19-and-europe-s/covid-19-and-europes-environment>.
- GSDRC: Urban governance <https://gsdrc.org/topic-guides/urban-governance/concepts-and-debates/what-is-urban-governance/>
- Housing 2030: Effective policies for affordable housing in the UNECE region. Information is available at <https://www.housing2030.org/>.
- ILO (2020). “Policy Brief: COVID-19: Public employment services and labour market policy responses”. Available at https://www.ilo.org/wcmsp5/groups/public/--ed_emp/documents/publication/wcms_753404.pdf.
- ILO (2021). “Rapid assessment of the employment impacts of the COVID-19 pandemic in Kyrgyzstan.” Available at https://www.ilo.org/wcmsp5/groups/public/---europe/---ro-geneva/---sro-moscow/documents/publication/wcms_761673.pdf
- International Union for Conservation of Nature (IUCN). Nature-based solutions definitions. Available at [https://www.iucn.org/commissions/commission-ecosystem-management/our-work/nature-based-solutions#:~:programme=text=Nature per cent20Dbased per cent20Solutions per cent20\(NbS\),Photo per cent3A per cent20copyright](https://www.iucn.org/commissions/commission-ecosystem-management/our-work/nature-based-solutions#:~:programme=text=Nature%20based%20Solutions%20(NbS),Photo%20per%20copyright).

International Monetary Fund (IMF), 2021. World Economic Outlook Databases. Available at <https://www.imf.org/en/Publications/SPROLLs/world-economic-outlook-databases#sort=percent40imfdatepercent20descending>.

International Monetary Fund (2021). “Policy Responses to COVID-19”. Available at <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>.

IPCC (2007). Report Buildings. Available at https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_chapter9.pdf.

ITU. United for Smart Sustainable Cities (U4SSC). Available at <https://www.itu.int/en/ITU-T/ssc/united/Pages/U4SSC-info.aspx>.

Jacobs, J. (1961). The Death and Life of Great American Cities. New York City. NYC: Random House.

Kenworthy et al. (1999). Patterns of automobile dependence in cities: an international perspective. Available at <https://www.sciencedirect.com/science/article/abs/pii/S0965856499000063>.

McKinsey & Company. (2020) “Restoring public transit amid COVID-19: What European cities can learn from one another”. Available at <https://www.mckinsey.com/industries/travel-logistics-and-transport-infrastructure/our-insights/restoring-public-transit-amid-covid-19-what-european-cities-can-learn-from-one-another>

Milan’s digital transformation (September 2020). Available at <https://www.steminthecity.eu/>

Milano 2020 – Adaptation Plan (May, 2020). Available at https://www.intelligentcitieschallenge.eu/sites/default/files/2020-05/Pieropercent20Pelizzaro_Milanopercent202020percent20-percent20Adaptationpercent20plan_0.pdf

Miller, E., & Shalaby, A. (2000). Travel in the Greater Toronto Area: Past and Current Behaviour and Relation to Urban Form. Available at [https://ascelibrary.org/doi/abs/10.1061/\(ASCE\)0733-9488\(2003\)129:1\(1\)](https://ascelibrary.org/doi/abs/10.1061/(ASCE)0733-9488(2003)129:1(1)).

OHCHR “Housing has become the front-line defense against the coronavirus. Home has rarely been more of a life-or-death situation.” Available at <https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25727>.

OPPLA. EU Repository of Nature-Based Solutions more information is available at <https://oppla.eu/casestudy/19236>

Resilient Cities Network. “Resilient city”. Available at <https://resilientcitiesnetwork.org/faq/#:programme:text=Urbanpercent20resiliencepercent20ispercent20thepercent20capacity,andpercent20chronicpercent20stressespercent20theypercent20experience>.

Rockefeller Foundation. “City Resilience Framework”. Available at <https://www.rockefellerfoundation.org/report/city-resilience-framework/>

UNDA 12th Tranche project on innovative financing for sustainable smart cities. Implementation period: January 2020 – March 2023. Available at <https://unece.org/housing/innovativefinancing-sustainable-smart-cities>

UNDA. “Rapid Responses: 13th Tranche project. Implementation period: July 2020 – December 2021”. Available at <https://unece.org/housing/urban-resilience-after-covid19>

United Nations (2020). “Comprehensive Response to COVID-19: Saving Lives, Protecting Societies, Recovering Better”, New York City. Available at https://www.un.org/sites/un2.un.org/files/un_comprehensive_response_to_covid-19_june_2020.pdf

United Nations (2020) “Policy Brief: COVID-19 in an Urban World”, New York City. Available at https://www.un.org/sites/un2.un.org/files/sg_policy_brief_covid_urban_world_july_2020.pdf

United Nations “Shared Responsibility, Global Solidarity: Responding to the socio-economic impacts of COVID-19”. New York City. Available at https://www.un.org/sites/un2.un.org/files/sg_report_socio-economic_impact_of_covid19.pdf

United Nations (2007). “New Urban Agenda – Habitat III. 2007”. Available at <https://uploads.habitat3.org/hb3/NUA-English.pdf>

United Nations Secretary General. General Assembly Special Session in Response to the COVID-19 Pandemic. New York City on 3 December 2020. Available at <http://webtv.un.org/watch/ant-per-centC3-per-centB3nio-guterres-un-secretary-general-on-the-31st-special-session-of-the-general-assembly-in-response-to-the-coronavirus-disease-covid-19-pandemic-3-4-december-2020/6213891915001/#t=18s>

United Nations Secretary General. General Assembly Seventy-first session. “Sustainable development: disaster risk reduction”. Available at https://www.preventionweb.net/files/50683_oiewgreportenglish.pdf

United Nations (2007). “New Urban Agenda – Habitat III”. Available at <https://uploads.habitat3.org/hb3/NUA-English.pdf>

UNDESA ‘Policy Brief No.61. COVID-19: Embracing digital government during the pandemic and beyond.’ Available at https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/publication/PB_61.pdf

UNDESA (2020). “Recover Better. Economic and Social Challenges and Opportunities”, New York City. Available at https://www.un.org/development/desa/en/wp-content/uploads/2020/07/RECOVER_BETTER_0722-1.pdf

UNECE Committee on Urban Development, Housing and Land Management. Annotated provisional agenda for the eighty-first session, ECE/HBP/205. Available at https://unece.org/DAM/hlm/documents/2020/ECE_HBP_205-E.pdf

UNECE (2020). “Promoting energy efficiency standards and technologies to enhance energy efficiency in buildings”. Available at <https://unece.org/DAM/hlm/documents/Publications/ECE-ENERGY-series-60.pdf>

UNECE (2003). “Protocol on Strategic Environmental Assessment (SEA)”. Available at <https://unece.org/fileadmin//DAM/env/eia/documents/legaltexts/protocolenglish.pdf>

UNECE (2015). “UN Geneva Charter on Sustainable Housing”, Geneva. Available at https://unece.org/DAM/hlm/charter/Language_versions/ENG_Geneva_UN_Charter.pdf

UNECE and ITU (2017). “Collection Methodology for Key Performance Indicators for Smart Sustainable Cities”, Geneva. Available at <https://unece.org/DAM/hlm/documents/Publications/U4SSC-CollectionMethodologyforKPIfoSSC-2017.pdf>

UNECE ‘Geneva Declaration of Mayors.’ Geneva, 2021. Available at [https://unece.org/sites/default/files/2021-03/Mayors per cent20declaration per cent20booklet per cent20- per cent20ver.4.pdf](https://unece.org/sites/default/files/2021-03/Mayors%20per%20declaration%20per%20booklet%20per%20ver.4.pdf)

UNECE ‘Guidance for the implementation of the Geneva UN Charter on Sustainable Housing. Ensure access to decent, adequate, affordable and healthy housing for all.’ Geneva, 2016. Available at https://unece.org/DAM/hlm/documents/Publications/Charter_Guidance.pdf

UNECE ‘People-Smart Sustainable Cities. Sustainable and Smart Cities for all Ages.’ Geneva, 2021. Available at [https://unece.org/sites/default/files/2021-01/SSC per cent20nexus_web_opt_ENG_0.pdf](https://unece.org/sites/default/files/2021-01/SSC%20per%20nexus_web_opt_ENG_0.pdf)

UNECE Statistic Division “COVID-19 and official statistics”. Available at <https://statswiki.unece.org/display/COV/Support+for+managing+the+crisis#Supportformanagingthecrisis-Country>

UNECE. “Sustainable and smart cities for all ages”. Available at <https://unece.org/sustainable-and-smart-cities-all-ages>

UNECE and UN-Habitat (2020). “Guidelines on evidence-based policies and decision-making for sustainable housing and urban development”, Geneva. Available at https://unece.org/DAM/hlm/documents/Publications/2020_Guidelines_on_evidence-based_policies.pdf

UNECE (2020). “Smart Sustainable Cities Profile Nur-Sultan, Kazakhstan”, Geneva. Available at [https://unece.org/sites/default/files/2021-01/Nur-Sultan per cent20City per cent20Profile_compressed_E.pdf](https://unece.org/sites/default/files/2021-01/Nur-Sultan%20City%20Profile_compressed_E.pdf)

UITP, (2020) OPEN LETTER : European CEOs and city representatives call for local public transport to be a key sector in the European recovery plan. Available at [https://www.uitp.org/sites/default/files/cck-focus-papers-files/PUBLIC per cent20TRANSPORT per cent20IS per cent20CRITICAL per cent20FOR per cent20EUROPEAN per cent20RECOVERY per cent20- per cent20FINAL per cent20VERSION.pdf](https://www.uitp.org/sites/default/files/cck-focus-papers-files/PUBLIC%20per%20TRANSPORT%20per%20IS%20per%20CRITICAL%20per%20FOR%20per%20EUROPEAN%20per%20RECOVERY%20- per%20FINAL%20VERSION.pdf)

USAID ‘Building Resilience to Recurrent Crisis. USAID Policy and Programme Guidance’.
Available at
<https://reliefweb.int/sites/reliefweb.int/files/resources/USAIDResiliencePolicyGuidanceDocument.pdf>

UNECE. People-First Public Private Partnerships (PPPs). Available at <https://www.uneceppp-icoe.org/pedople-first-ppps/>

UNECE (2019). “Guidelines for the formalization of informal constructions”, Geneva. Available at
https://unece.org/DAM/hlm/documents/Publications/Technical_guidelines_informal_settlements.EN.pdf

UNECE Report of the Committee on Housing and Land Management on its seventy-seventh session, ECE/HBP/188. Available at
https://unece.org/DAM/hlm/documents/2016/ECE_HBP_188.en.pdf

UNEP (2017). Report. “Emissions Gap Report”. Available at
https://wedocs.unep.org/bitstream/handle/20.500.11822/22070/EGR_2017.pdf.

UN-Habitat (2016). “Report Urbanization and Development: Emerging Futures. World Cities Report”. Available at <https://unhabitat.org/sites/default/files/download-manager-files/WCR-2016-WEB.pdf>

UN-Habitat “Urban Resilience Hub”. Available at <https://urbanresiliencehub.org/CRPP/>

WHO (2021). Statistic COVID-19 Dashboard, Geneva. Available at <https://covid19>

WHO (2021). “Urban air quality”. Available at
<https://www.who.int/data/gho/data/themes/topics/topic-details/GHO/ambient-air-pollution>

WHO (2016). “Report Ambient air pollution: A global assessment of exposure and burden of disease”. Available at
<https://apps.who.int/iris/bitstream/handle/10665/250141/9789241511353-eng.pdf?sequence=1>

World Bank (2021). ESMAP. “Planning Energy Efficient and Livable Cities”. Available at
<https://openknowledge.worldbank.org/bitstream/handle/10986/21308/936780NWP0Box30ble0Cities0optimized.pdf?sequence=1&isAllowed=y>

