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Inspire Policy Making with Territorial Evidence

CASE STUDIES REPORT //

Territorial impacts of COVID-19 and policy answers in European regions and cities

Cross-case Synthesis Report

Final report // June 2022

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This document is a final report.

The information contained herein is subject to change and does not commit the ESPON EGTC or the countries participating in the ESPON 2020 Cooperation Programme.

The final version of the report will be published as soon as it is approved.

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1 Introduction

As part of the ESPON Covid-19 project, 14 case study regions were selected to provide an in-depth analysis of the regional and local level policy response to the pandemic. The main aim of the case studies was to assess whether the crisis presented a 'window of opportunity' for regional and local institutions and actors to promote 'proactive' spatial planning and territorial policies. Each case study report followed the same structure based around the following core sections:

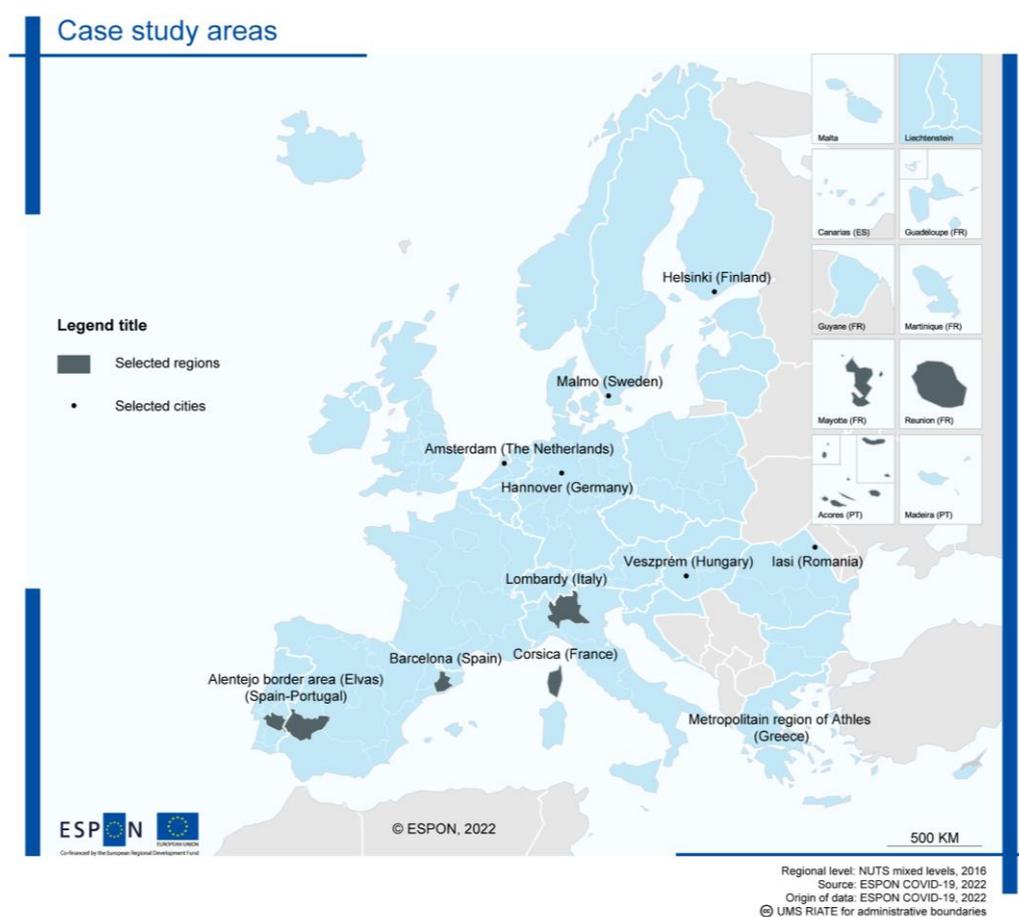
1. **Regional Characteristics:** an overview of the key socio-economic and governance characteristics of the region.
2. **Impact of Covid-19:** an assessment of the main socio-economic impacts of the pandemic on the region.
3. **Covid-19 Policy Response:** a review of proactive policy responses in relation to three core policy thematic areas - the just transition (social and economic policies), green transition (climate policies) and smart transition (innovation and digitalisation policies).
4. **Covid-19 Policy Impacts:** Assessing the added value of the policy measures introduced and the main governance and financial impacts of the pandemic.
5. **Future Policy Directions:** Evaluating if the policies introduced could be transferred to other European cities and regions and the future regional policy directions post-pandemic;
6. **Policy Recommendations:** Providing policymakers and practitioners with practical policy, governance, territorial, and financial recommendations to help build regional resilience and support policymaking in future crisis periods.

This report provides an overview of the main findings and conclusions from across the 14 case studies, highlighting the main similarities and differences in Covid-19 policy responses and impacts. The analysis is supplemented by individual case study reports which provide an breakdown of all policies identified from across the case areas.

2 Selection of Cases Study Regions

The 14 case study regions were selected to reflect a balanced geographical distribution across Europe (based on the United Nations geoscheme: Eastern Europe, Northern Europe, Southern Europe and Western Europe). The case areas are visualized in Map 1 below, including: Amsterdam, Athens, Azores, Barcelona, Corsica, Elvas, Hannover, Helsinki, Iasi, Malmo, Milan, Mayotte, Reunion, and Veszprem.

Map 1 Case Study Regions



The regions cover a variety of territorial contexts, such as urban, rural, intermediate, cross-border and island regions. The cases also include regions in both centralized and decentralized national governance systems, with different types of regional/local level governance structures where roles and responsibilities are dispersed across multiple local level authorities (e.g., municipal authorities, metropolitan authorities and regional authorities). Heterogeneity across cases was considered important to explore how Covid-19 has impacted on regions with different territorial, governance and socio-economic characteristics, as outlined in Table 1 below.

Table 1 Overview of case study region geographic, socio-economic and governance characteristics

Region	European Location	Type of Region	Social Characteristics	Economic Characteristics	Governance Structure
Amsterdam (NL)	North	Urban	Growth in population leading to housing challenges. Generally high levels of education but growing unemployment among less-educated groups.	Highly specialised economy in ICT, commercial services and culture/tourism sectors.	Centralised
Athens (EL)	South	Urban	Declining and aging population. High levels of unemployment and poverty. High levels of tertiary education compared to the country average.	Economy based on tertiary sector with specialisation in culture and tourism, information and communication technology (ICT), real estate, and financial & insurance activities.	Centralised
Azores (PT)	South	Island	High levels of unemployment, poverty and social exclusion. Low levels of education compared to the national average.	Economy based on public administration, agriculture, fisheries, tourism and retail trade.	Centralised
Barcelona (ES)	West	Urban	Growing population trend and high levels of employment. Children, women and migrants are considered the most vulnerable groups pre-pandemic.	Diverse economy with strong industry base and high levels of innovation.	Decentralised
Corsica (FR)	South	Island	Population growth three times higher than the national average. One household in five living below the poverty line.	The tertiary sector is the main employer on the island.	Centralised
Elvas (PT)	West	Rural Cross-border	Population decline and ageing society. High levels of poverty, unemployment and low education levels compared to the national average.	Economy based on tertiary sector and local SMEs working in tourism and retail trade. Low levels of innovation and closure of large industries.	Decentralised
Hannover (DE)	Central	Urban	Ageing population and low birth rates. High levels of immigration and youth unemployment. Mortality rates higher than the national average.	Mixed economy based on tertiary, industry and agriculture sectors.	Decentralised
Helsinki (FI)	North	Urban	Growing population. High employment and income levels. High education levels and consistently high scores on quality-of-life indexes.	Economy based on service sector and ICT-based industries.	Decentralised
Iasi (RO)	East	Intermediate Cross-border	High poverty rates and low levels of education. Growing population rates.	Economy based on tertiary sector and automobile industry. Low innovation levels and labour shortages in the ICT sector.	Centralised
Malmo (SE)	North	Urban Cross-border	Growing population. Mixed education levels. High unemployment among youths and immigrants. Lower income levels.	Diverse economy in chemical industry, ICT, life sciences, engineering, food, and construction. Extremely high levels of innovation.	Decentralised

Mayotte (FR)	South	Island	Growing population (strong surplus of births over deaths). Younger population than elsewhere in France (the average age is 23, compared to 41 in mainland France). The median standard of living is seven times lower than at the national level, and poverty is very high.	The non-market sector is underdeveloped, and economic base is very informal.	Centralised
Milan (IT)	South	Urban	High levels of employment and education. High population growth and low levels of poverty	Diverse economy including manufacturing industries, agriculture, fashion and banking. High levels of innovation, ICT and biotechnology.	Decentralised
Reunion (FR)	South	Island	Demographic growth driven by the natural balance, young population; high poverty and median living standards below the national average.	A highly developed non-market tertiary sector.	Centralised
Veszprem (HU)	East	Intermediate	Decreases in population and ageing society. High education levels and low unemployment. Limited poverty and social exclusion.	Diverse economy largely based on manufacturing and service sectors in culture and tourism. Growing R&D infrastructure.	Centralised

3 Case Study Key Concepts

The case studies assessed whether the Covid-19 pandemic presented a ‘window of opportunity’ for regional and local authorities to promote ‘proactive’ spatial planning and territorial policies. **Proactive policies** were defined as “measures that try to make best use of the particular socio-economic circumstances to further a specific regional policy and planning goal”. The assessment of proactive policy responses to the crisis was broken down into three core thematic areas: 1) just transition policies; 2) green transition policies; 3) smart transition policies.

The term ‘*just transition*’ is used in reference to the shift towards a climate-neutral economy and ensuring that this move occurs in a fair way, so any of the potentially negative social impacts of transition leave no one behind. In this study, **just transition** was used more broadly to examine any social policies introduced during the pandemic which aim to improve human welfare and meet the needs of citizens, particularly the most vulnerable groups in society. Under this theme, social policies are extended to include economic policies (e.g. furlough schemes, tax reductions, increased welfare benefits) intended to limit bankruptcies, save jobs, and mitigate social challenges caused by unemployment and poverty. **Green transition** was defined as policies aimed to enhance climate neutrality, environmental sustainability, and the shift to a carbon neutral economy. Leaning on the EU definition of smart cities, **smart transition** was defined as policies that promote innovation and entrepreneurship, by focusing on making industries, businesses, networks and services more effective through the use of digital solutions. The definition was extended to include the concept of smart specialization and policies related to increasing innovation and facilitating the development of innovative startups, entrepreneurial businesses and companies. Table 2 provides an overview of the types of policies that the case study research team explored in relation to each theme.

Table 2 Proactive Covid-19 Policy Examples

Policy Theme	Type of Policies
Just Transition	Policy measures supporting young people, the elderly, low-income families, immigrants and the homeless. Other policies focused on taxation and unemployment, poverty, social exclusion, housing and living conditions, education and training, culture and sports activities, wealth inequalities, health and working conditions, business support.
Green Transition	Policy measures supporting mobility, public space and green areas, city centre and business district management, land-use changes, waste management and the circular economy, green tourism, climate mitigation and adaptation.
Smart Transition	Policy measures supporting digitalisation of public services, e-governance, startups, entrepreneurial innovation, e-learning, digital access and competencies, multi-locality working, big data, and smart transport.

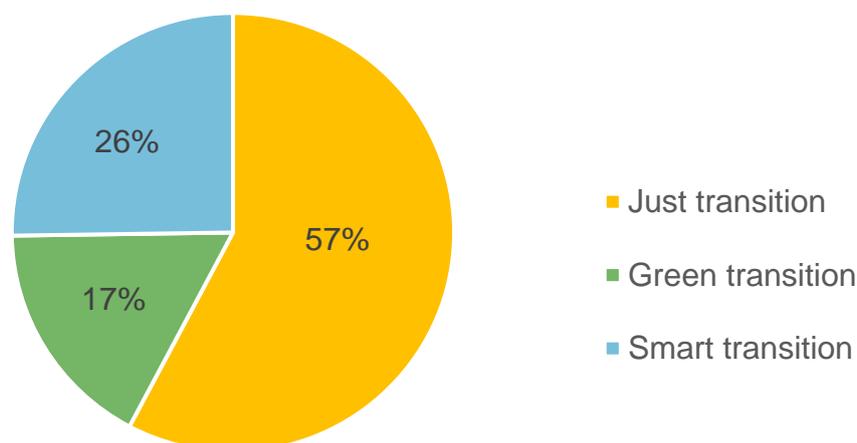
4 Research Methods

The case studies were developed using a mixed-methods approach. First, a desk study of regional and local policy documents and strategies was conducted, examining whether there had been significant changes in the overall direction of policies as a result of the crisis. This review also provided the basis for the identification of different proactive policies introduced in response to the crisis. Second, this policy analysis was supplemented by semi-structured interviews to gauge the views and perceptions of regional and local actors on the policy response to the crisis, including public representatives, sectoral actors, and civil society groups. Interviewees were asked to reflect on: 1) whether the pandemic presented a window of opportunity for regional and local authorities to change the direction of policy; 2) assess the impact of the policies introduced; and 3) consider the effects of the pandemic on regional and local governance and financing structures. The information presented below provides a synthesis of the key findings from across all 14 case studies, highlighting the different types of policies introduced in response to the crisis in the three transition areas discussed.

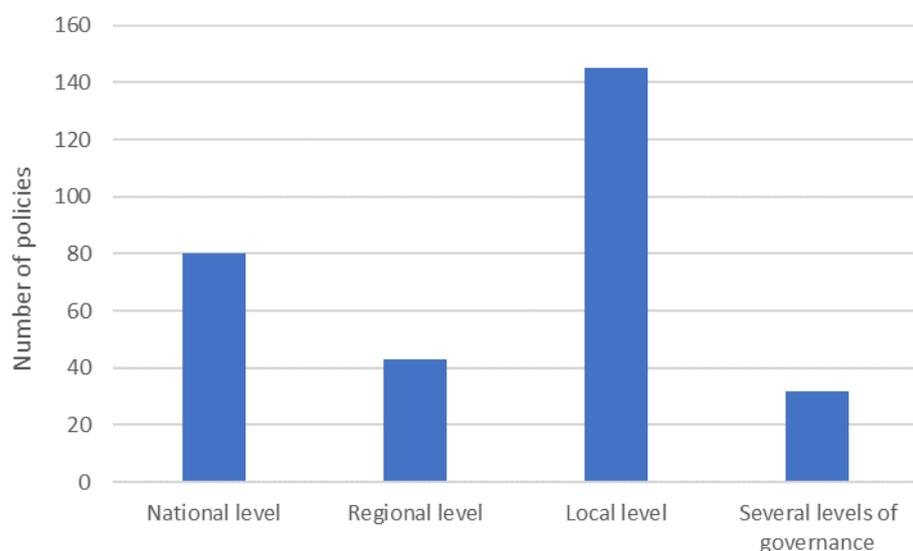
5 Assessing the Policy Response to Covid-19: Overall Policy Findings

In total, **301 policies were identified across the 14 case studies** in this project. As shown in Figure 1, a majority of these (57%) fall in the just transition area. The Covid-19 pandemic was primarily a health crisis, but quickly also had strong repercussions for local economies and labour markets. Regional and local authorities across the case study areas responded to the emerging challenges by introducing support measures for businesses, financial aids for unemployed people as well as different types of social measures to meet basic needs, reduce social exclusion and loneliness. Policies focusing on digitalization processes, e-governance and innovation (smart transition policies) also received considerable attention from policy makers at regional and local level. 26% of all measures identified in this project fall in this area. Green transition policies were the smallest group of policies that were identified in this project (17%) and include measures focused on creating and maintaining green spaces, promoting sustainable tourism, and encouraging sustainable mobility.

Figure 1 Distribution of proactive policies across the just, green, and smart transition themes



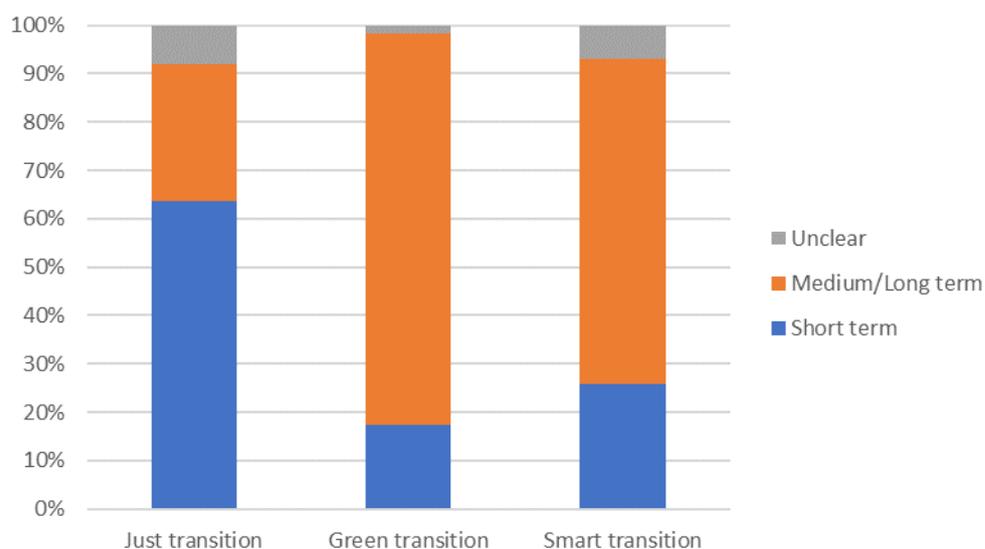
Across the 14 case study areas, most proactive policies were drafted, adopted and implemented by public authorities at the local level (see Figure 2). Nonetheless, interview partners also highlighted proactive policies that had been adopted at national or regional level and provided important support for local businesses and population. National level policies were brought up by interview partners especially in Amsterdam and Athens, two case study areas in countries with centralized governance structures. Malmö and Corsica are among the case studies where regional authorities adopted a range of relevant proactive policies. In a smaller number of cases, different levels of governance collaborated in adopting or implementing proactive policies.

Figure 2 Proactive policies by level of governance

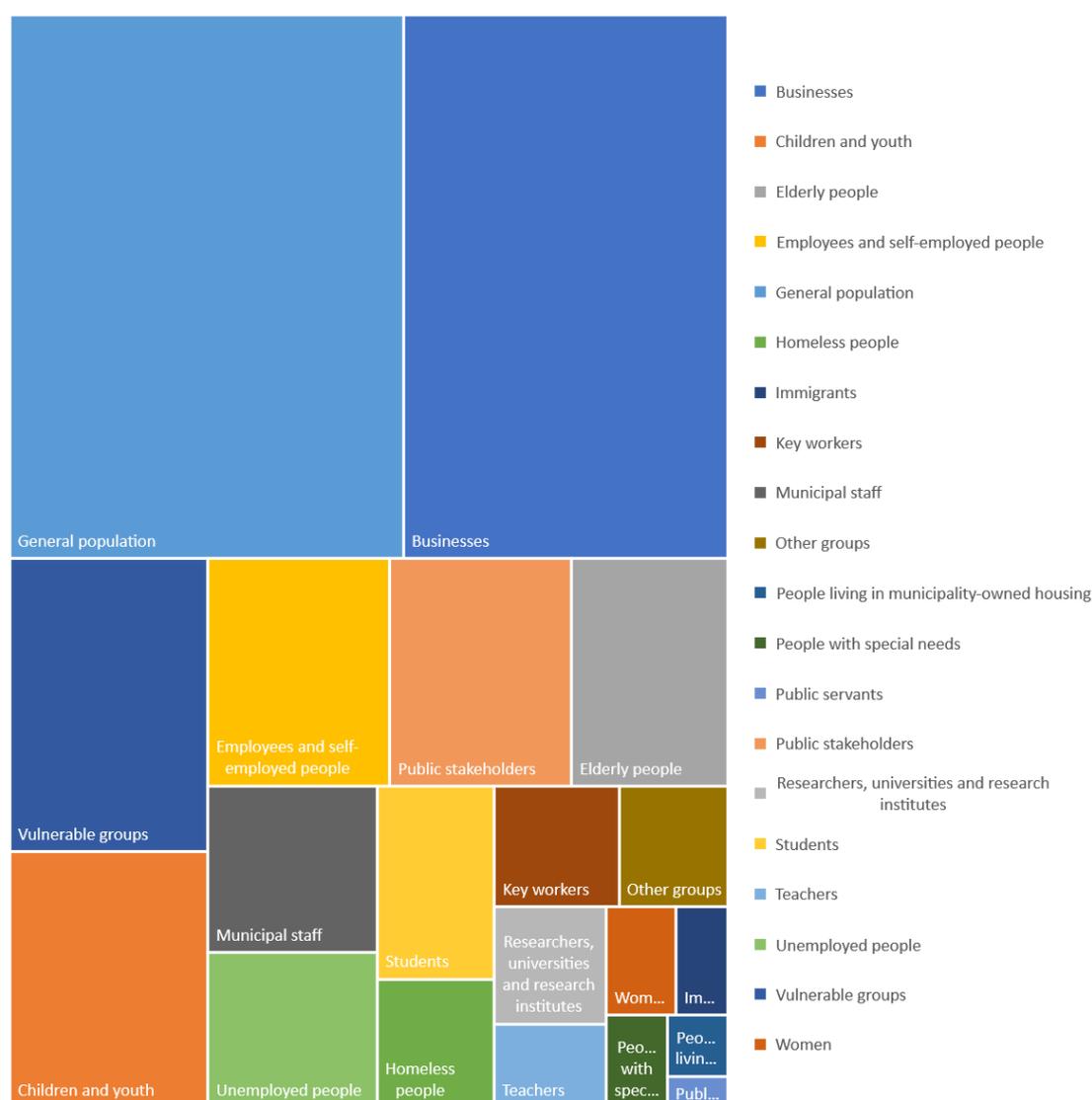
During the interviews, local and regional actors were also asked about the planned duration or time scale of the different proactive policies. Two time horizons were distinguished. Policies were classified as short-term if goals and implementation periods were of limited duration and closely tied to the pandemic context. One example are the various measures that regions and municipalities put in place to support struggling businesses during the pandemic. These were usually implemented to meet the most urgent needs but they were not intended to extend beyond the pandemic. On the other hand, if policies were not set to end with the pandemic but instead were planned to be implemented or pursued with a medium- or longer-term perspective, they were classified as medium-/long-term policies. Here an example would be measures to support the digitalization of public services and e-governance. Even though these measures were adopted during the pandemic, the digital offers were generally planned to be available in the long term. In a few cases, it was still under discussion whether policies should be extended post-pandemic. These policies were classified as having an 'unclear' time scale.

When comparing the time scale of the proactive policies across the just, green and smart transition areas, interesting differences emerge. As shown in Figure 3, a large majority of just transition policies followed short-term goals. This is because many of the social and economic policies that were identified in this area aimed at alleviating the most pressing effects of the pandemic. This includes, for example, financial support measures for businesses, policies to buffer drops in income of vulnerable groups or activities to reduce loneliness for those who had to isolate themselves. These measures were closely tied to the pandemic context. Nonetheless, some just transition policies were also planned with a medium- or longer-term perspective. This includes, for example, measures that encouraged local companies to rethink their business profile and strategy during the pandemic, but also measures which created new platforms or networks between different types of local actors to facilitate local responses to the pandemic and facilitate collaboration in the long term.

Among the green and smart transition policies that were identified in this project, the pattern is reversed. In these two policy areas, a large majority of policies pursued medium- or longer-term goals. For instance, measures to create new green spaces and maintain existing parks, to support sustainable tourism or to promote the use of public transport all have a longer time horizon. Only a minority of green and smart transition policies had a short-term character. This includes policies that, for instance, temporarily reduced fees for public bicycle sharing systems to encourage people to cycle during the pandemic, or investments to buy digital equipment for lower-income families which enabled them to learn and work remotely during the pandemic.

Figure 3 Time scale of proactive policies

The project also identified the main target groups or beneficiaries of all proactive policies. Figure 4 shows the main groups that were identified, with the size of the boxes indicating the amount of policies targeting each group. The categories are not mutually exclusive. In other words, for many policies two or more groups of beneficiaries could be identified. Two groups stand out. First, a large number of policies did not have a specific target group but were potentially beneficial for the entire population. For example, green spaces that were planned during the pandemic, cultural events that were held in public spaces or new digital tools to reach public services were available to all. A second large group of policies was targeted at businesses. Across case study areas, authorities at different levels of governance implemented various measures to support businesses who were struggling during the pandemic by offering grants and tax exemptions, by encouraging digitalisation and innovation processes or by connecting local businesses, producers and consumers. In addition to these two main groups of beneficiaries, many policies and measures also targeted different vulnerable groups at large during the pandemic. Further policies focused on particular population groups that were perceived as requiring additional support, for example, older adults and children, unemployed people and the homeless, as well as students or immigrants.

Figure 4 Target groups and beneficiaries of the proactive policies

Although most policies could be considered immediate responses to the pandemic, there are many innovative ideas and pioneering solutions that have the potential to be used beyond the pandemic context. Even those policies that may not be suitable to be implemented long-term should remain part of institutional memories since they could become highly useful in potential future health or economic crises. Some policies were also planned with a longer-term perspective and aimed at capitalizing on the pandemic by accelerating the digital and green transition or promoting other regional development goals. Among those, several initiatives and measures have the potential to be upscaled or shared as inspirational best-practice examples across Europe. In the following sections, we will describe some concrete proactive policies and highlight a few best-practice measures identified across the 14 case study areas. A full list of all proactive policies that were identified in this project is available in Annex 1.

5.1 Just Transition - Policy Breakdown

Just transition policies were the most prominent type of policy identified across the case study regions. The case studies do indicate that many of the just transition policies introduced were short-term in nature but have long-term potential and could help manage some of the medium and long-term socio-economic impacts of the pandemic for vulnerable groups. Covid-19 has also served as a catalyst for regional authorities to be more proactive in restructuring health and social care infrastructures, and investments in these areas will be beneficial in the long-term. Table 3 provides a breakdown of the social policies identified across the cases by thematic area, and each is described in brief below.

Table 3 Thematic breakdown of just transition policies across case study regions

Just Policy Themes	Type of Policies
Business support	Policies that support different types of businesses to help avoid bankruptcies and safeguard jobs, including investments in infrastructure leading to business opportunities and job creation.
Income support	Measures that aim at replacing lost income during the crisis or reducing household expenses by suspending taxes or loans.
Food, medical and housing support	Measures to provide practical support for vulnerable groups by covering costs related to housing (rent, energy, water), providing shelter, and by ensuring access to food, medicine, personal hygiene products and other basic essentials.
Social support	Policies aimed at providing social support to different population groups during the pandemic (e.g. via facilitating social contacts and activities). Focus is placed on target groups such as children, older adults, immigrants, homeless people, and women. This category also includes policies and campaigns to support the victims of gender violence during the pandemic.
Physical activities	Measures which support sports facilities and encourage physical activity among the population.
Cultural offers	Policies designed to sustain cultural activities and artists, including open-air events organized by theatres, museums, and libraries.
Mental health services	Measures aimed at offering psychological support to different population groups during the pandemic.
Communication and knowledge sharing	Measures to help disseminate information and knowledge about the pandemic, vaccinations, personal protection, labour rights, etc. to the local population. The category also includes measures that encourage knowledge sharing between key workers, such as health-care professionals, during the pandemic.
Education and training	Training programmes for the unemployed, and support for struggling students, including summer camps and tutor programmes.

Business support: The pandemic was a challenging period for many businesses who struggled with disrupted global supply chains, lockdowns, a drop in customers, social distancing and hygiene requirements. In order to protect viable businesses from bankruptcy and safeguard jobs, public authorities at local, regional and national level adopted various support measures. These included subsidies, one-time payments, loans, and grants. Several case study areas also postponed deadlines for the payment of fees and taxes and did not charge rent from businesses in publicly owned properties. In several case study areas, businesses receiving financial support were encouraged to use the pandemic period for structural adaptations and investments in digital services and more sustainable practices and solutions. Finally, local authorities supported local businesses by trying to engage new customers. This was done, for example, via publicity campaigns in Corsica and Barcelona, which aimed at raising awareness of the importance of buying local. Several of these initiatives have the potential to be implemented even after the pandemic to reach sustainability goals and support the local economy.

Business Support Best Practices

Additional outside seating areas in Athens restaurants and cafés: The city of Athens allowed cafés and restaurants to create seating areas on street pavements. The aim of this policy was to support businesses by attracting new customers, and offering people a safe, outdoor environment to meet during the pandemic, thereby increasing the quality of life in the local area. Nonetheless, it has raised concerns about the privatization of public space. The mayor of Athens has decided to maintain this measure beyond the pandemic. It is quite possible that this measure could be easily implemented in other European cities (no matter how big the city is).

Electronic Apps for Lombardy restaurants and cafes: The Municipality of Bergamo, together with the tourism promotion company VisitBergamo, and the shopkeepers' association Ascom, introduced a series of measures to provide answers to economic nature problems related to the pandemic and to better manage the flow of individuals, avoiding contagion. For this reason, a web-app, "Prenota Bergamo", was developed: the application made it possible to book services from the web or from smartphones in offices, shops, and premises in the Bergamo municipal area. The policy is part of the digitalisation initiatives and is aimed primarily at supporting businesses and shops, and for the benefit of consumers, to cope with the restrictions caused by the Covid-19 health emergency. This policy was highly successful, and the

application was developed and expanded to manage access and booking of municipal office services (registry, document management, tax, and land registry services, etc.). The measure - adopted at municipal level - was introduced after the first pandemic wave and has been maintained in subsequent waves. Given the wide resonance of the initiative, it is possible to assume that it will remain active in the medium to long-term in the post-pandemic period: this assumption is also determined by the fact that the application is constantly being implemented and its use expanded.

Income support: Some sectors such as tourism, retail and culture were more strongly hit by the pandemic and the mitigation measures that were quickly put in place. People working in these sectors had a higher risk of becoming unemployed. In order to buffer income losses and avoid increases in poverty among these groups, public authorities in the case study areas implemented a range of instruments and measures. These included financial support to self-employed people, freelancers or those who work on flexible contracts and do not qualify for unemployment benefits. Several case study areas also extended unemployment benefits or suspended the payment of tax obligations for employees whose contracts were suspended.

Income Support Best Practice

Financial support for the self-employed in Amsterdam: The TOZO (*Tijdelijke overbruggingsregeling zelfstandig ondernemers*) policy is a temporary economic measure designed to soften the blow to a particular segment of society. It supported self-employed people during the COVID crisis, either via as direct income support (similar to welfare) or as loans (capital injection) to the business: It is a national programme, but administered by municipalities who were also responsible for preventing or sanctioning improper use (e.g. persons with working partners were ineligible). Amsterdam had more claims than the next four large cities combined because so many of its citizens work in sectors like arts and culture, tourism, and hospitality. Almost €5b have been paid out via this scheme. As of 1 January 2021, anticipating a phasing-out, the TOZO was modified to guide self-employed people to reinvent themselves to increase their employability. Amsterdam decided to double its capacity to help self-employed people struggling with debt and allowed them to get a business coach and support to help them orient themselves towards labour market opportunities. The scheme has now been discontinued.

Food, medical and housing support: As unemployment increased during the pandemic, an increasing number of people and families experienced challenges in paying bills and affording basic necessities. Several case study regions developed measures to support these groups and alleviate some of the most immediate challenges. This included, for example, financial support to pay for medical expenses, delivery of meals and food packages, payment of water and energy bills and home support services. Many vulnerable families also struggled to pay rent and were at increased risk of experiencing homelessness. Public authorities in different case study areas supported these groups by reducing or suspending rent payments and creating temporary shelters.

Food, medical and housing support best practices

Barcelona Housing support for homeless and vulnerable families: As a housing support policy, this action aimed to accommodate vulnerable families whose homes did not meet the conditions to endure confinement and provide homeless people with temporary stay spaces in Barcelona and in other municipalities within the Metropolitan Area. Based on a needs diagnosis in the territory, the Provincial Council of Barcelona, as well as the Barcelona City Council, collaborated with local stakeholders like the Catalan Agency of Tourism or *Caritas*. Only considering the city of Barcelona, 200 tourist apartments were used as temporary housing and a pavilion of *Fira de Barcelona*, a public trade fair venue holding industrial and professional fairs, was offered to 150 homeless people to help them find shelter during the pandemic. Even if the policy had a short-term nature, its application to long-term and other regions would be useful to be considered.

Mayotte water provision infrastructure: People in Mayotte do not usually have sufficient access to water. The regional government of the island of Mayotte installed new water ramps during the pandemic. The water ramps were an urgent policy response to allow the population to have better access to water during the health crisis. The goal was to ensure that no one was left behind and had access to water. This measure was implemented at the regional scale for the whole island. Some have recently been dismantled, but the facilities remain operational. The water ramps could be quickly reinstalled in the event of a new health crisis. Local actors have already recognized the positive effects of these installations and wish to continue their deployment in the future.

Réunion food support: The crisis has affected the vulnerable populations of the island and there was an urgent need for action. The Regional and General Council of Réunion distributed food vouchers and parcels to the most deprived inhabitants and students, as well as fresh food baskets to the elderly. This policy was implemented during the different waves of the Covid-19 pandemic to fight poverty. Local level actors, such as Communal Social Action Centers (Centre communal d'action sociale, CCAS), were also involved in the implementation of the policy. This was a new type of policy in Réunion as it targeted large

population groups (vulnerable, students, elderly). This measure will not be extended beyond the pandemic but it has had the merit of having positive effects.

Social support: Many people experienced feelings of loneliness during the pandemic. Public authorities implemented a range of activities and programmes to support population groups that were identified as being particularly vulnerable. For example, older people were identified as being at risk of experiencing isolation. As a result, different types of measures were implemented in the case study areas to keep them engaged and meet their care needs. For example, different public authorities increased aid at home programmes, and set up telephone helplines where older adults could get information and support. The City of Hannover organized a cycle rickshaw project where volunteers invite older adults on bike excursions with a rickshaw. Volunteers pedal and steer these rickshaws, allowing less mobile older persons to join as passengers and enjoy the ride. Regional and local governments also adopted a range of measures to address the needs and interests of children and young people during the pandemic. Authorities offered summer camps which allowed children and youth to participate in different kinds of activities, but also online workshops and digital activities. Young adults received support in several case study areas to master the transition between education and a first job during the pandemic. In Barcelona, the Provincial Council designed a campaign to raise public awareness of the signs of gender violence. It also spread information on how to get help to potential victims of gender violence.

Social Support Best Practice

Barcelona Elderly Support: Due to the Covid-19 crisis, the Barcelona Provincial Council's Local Telecare Service has set up a free telephone helpline for all people over 65 who are in a situation of vulnerability, isolation or risk, as identified by the local social services. It is a free telephone line for the users, which is activated by a fixed or mobile phone so that it is not necessary to install any device in the homes. 147 municipalities have requested the new 900 line, with a total of 3,212 new user registrations for this service. Through the telephone service, users can obtain information for requests related to Covid-19 and also obtain help in situations of distress. In addition, specific follow-up is provided to people in a situation of vulnerability, with symptoms or with confirmed Covid-19, or discharged patients. Since the beginning of the crisis, the call centre has managed 370,280 calls, most of them related to questions, follow-ups or emergencies caused by the Covid-19 pandemic. In addition, 29 Mobile Units of the Telecare Service have provided assistance across the whole province, following up on patients suffering from Covid-19 or experiencing related symptoms.

Veszprem Child Support: This policy measure was intended to support working parents and their children. Since many employees had to take compulsory holiday during the lockdown in the spring of 2020, many working parents would not have been able to manage and afford daily childcare for the entire summer vacation of kindergartens and schools, which usually lasts between 2 and 2.5 months in Hungary. In response, the local government of Veszprém coordinated and encouraged public cultural and sport institutions to organise as many programs and activities as possible during the summer, and to provide daily care and entertainment for children. Local NGOs were also involved: tenders have been launched for them to organise camps for children. The measure proved to be successful and popular, and the municipality has continued to promote and coordinate organising children camps in the coming summers.

Hannover youth organisations: The City of Hannover granted financial support to youth welfare organisations to secure their existence and to enable them to deliver free services to those in need. Amongst others, the city took over the full payment of the expense allowances for trainers, non-disposable cost shares of the facilities, and support for cancellation costs for events that could not be carried out during the pandemic. A similar measure was taken at regional level by the Hannover Region: the regional authorities granted similar financial support for welfare organisations to secure their existence. The financing was exclusively from public funding and was aimed to cover especially the first pandemic period. This was mainly a short-term measure, however its impact was not negligible, as ensured the survival and functioning of actors dealing with vulnerable populations. This type of measure represents an easy-to-replicate and high-impact (although short-term) solution during the first stages of a health crisis. The possibilities for replication in other territories are, although, dependent on the financial prowess of that territory.

Physical activities: Public health decreased during the pandemic, as people spent more time indoors, moved less and were more restricted in engaging in sports and recreation activities. Some regional and local authorities adopted measures to encourage local residents remain active and conscious of personal health.

Physical Activities Best Practice

Access to sports infrastructure in Barcelona: The policy "UN, DOS, TRES, JA!" had the goal to ensure the access to sports and leisure activities for the general population. In the province of Barcelona there are 4,420 municipal sports facilities, excluding those in the city of Barcelona, that were among the first

facilities to close to the public due to the COVID-19 pandemic. Now, in the post pandemic context, the Provincial Council has offered its support to the municipal councils for the safe reopening of all these facilities and, also, the use of outdoor itineraries, which allow practising sports and enjoying nature. To implement this policy, the Barcelona Provincial Council worked hand in hand with the City Councils of the different municipalities of the province to adapt the equipment and sports practice to the pandemic context and sanitary requirements. Even if the policy had a short-term nature, its application to long term and other regions would be useful to be considered.

Cultural offers: The cultural sector was heavily affected by the pandemic and the various mitigation measures that were adopted. Theatres, museums, libraries and concert halls were among the first which had to close during the pandemic, and if concerts, plays or other cultural activities could take place, the number of people in the audience usually had to be very limited. Many local and regional authorities therefore adopted measures to financially support cultural institutions and those working in the cultural sector. Policy makers also encouraged artists to move their performances and exhibitions online or outdoors where old and new audiences could enjoy them even during the pandemic.

Cultural Offers Best Practice

Culture Vouchers Helsinki: In the midst of the pandemic, all employees within the City of Helsinki organisation were granted an annual culture or sports voucher. This was in order to incentivise continued participation of the city's employee's as customers of the cultural, entertainment and sports sectors that were struggling particularly with the insecurities and restrictions induced by the pandemic. The targeted group and motivation was therefore dual; on the one hand, supporting the mental and physical well-being of city employees through increased culture and sports opportunities, and on the other hand, indirectly supporting the struggling culture sector's providers by incentivising increased user and audience numbers. The measure was carried out internally within the City of Helsinki organisation. The measure proved to be very popular and may be continued even after the end of the Covid-19 pandemic.

Mental health services: Across Europe, an increasing number of people experienced signs of anxiety and depression during the pandemic. Public authorities in the case study areas reacted by developing new psychological support services or even establishing emergency centers. These measures all had the goal of making psychological support more accessible to wider population groups and reduce waiting times.

Mental Health Services Best Practices

Psychological support Iasi: The pandemic has isolated many people. To avoid such isolation, Iasi decided to implement a specific measure. A "Social Emergency Center" was created at the initiative of the Federation of Non-Governmental Organizations for Social Services (a federation of 40 local and regional NGOs). The centre served as a point of contact and humanitarian assistance for citizens from Iasi County during the COVID-19 pandemic. It offered both psychological support and urgent material assistance (including food, medical services and medicines) for people in need. Several thousand residents have benefited from this support measure. This initiative was stopped in January 2022.

Mental health support Helsinki: The local authority of Helsinki outlined in 2021 an ambitious target of a 'mental healthcare guarantee'. The waiting time for anyone requesting mental health support or counselling, including in non-urgent cases, should be at a maximum of two weeks. The implementation of this reference for waiting times was envisioned already for the following year, 2022. The policy is targeted at the general population of citizens, particularly young people, living in the catchment area. In practice, the goal of the mental healthcare guarantee is directing the allocation of additional resources for mental healthcare support. Two new centres have been opened for citizens to receive low-threshold and easy access mental healthcare support. Vouchers have been introduced to provide young people and adults with short-term psychotherapeutic counselling, between 10 and 20 sessions. 20 new positions have been created for recruiting additional expert staff in short-term psychotherapy. Moreover, a new unit in child psychiatry is being created as a part of support structures available to families. While many of these measures were taken in the context of the pandemic, they are addressing Helsinki's mental health support capacity for the long term.

Communication and knowledge sharing: During the pandemic, public authorities undertook exceptional efforts to reach out to local populations and inform them how to lower personal risks of becoming infected and how to protect themselves and others. In order to reach out to all groups in society, authorities in the case study areas provided information in various languages, engaged representatives of different minority groups and closely cooperated with civil sector organisations. Public authorities also focused on providing key workers and municipal staff with all the necessary information and training they needed to fulfil their roles and tasks during the pandemic.

Communication and Knowledge Sharing Best Practices

Malmö Digital Communication Platform: The city of Malmö created a digital platform with 35 non-profit organisations within social work during the pandemic. The aim of the policy was to promote dialogue between the organisations and to handle common challenges that arose for the organisations during the pandemic. The idea was also to increase cooperation between civil organisations to see if they could share resources and facilitate for each other in order to support vulnerable groups. The policy was coordinated and started by the City of Malmö when they saw the need for closer cooperation with civil society actors to reach vulnerable groups. This policy was implemented during the pandemic and the plan was to solve an acute problem, not to continue the platform long-term. The meetings started when there was a need for extra cooperation and was dissolved when contacts between organisations had been made. In different ways, the city of Malmö tried to act as a meeting place for companies and civil society during the pandemic, to reach as many people as possible and make the most of public funding.

Information campaign for religious groups in Barcelona: With the aim of ensuring that local authorities take into account religious diversity, the Area of Social Cohesion, Citizenship and Welfare of the Provincial Council of Barcelona introduced the campaign "Recommendations on religious freedom and COVID-19". The campaign provided guidelines to local governments to guarantee the right to freedom of religion of its citizens and the adjustment to the measures of prevention and health protection and to the regulations coming from the declaration of the state of alarm. Specifically, it provided information on how to proceed with burials from the diversity of beliefs in accordance with the indications of the health authorities, recommendations regarding religious celebrations, and the impact of Covid-19 on the celebration of Ramadan. It is a medium/long term measure that could easily be applied by other regions.

Education and training: Across Europe, education and training programmes for children and adults were held online during large parts of the pandemic. The transition from classroom to digital learning created challenges both on the side of education providers and teachers, and on the side of children and adults who participated in classes. Public authorities in the case study areas implemented various measures and instruments to facilitate the transition to digital learning. Examples include initiatives to help children and youth who were at risk of falling behind as a result of digital education. Some public authorities also set up targeted training programmes during the pandemic. These were designed to swiftly train people so that they would be able to work in sectors with urgent labour demand, such as the care and health sectors.

Education and Training Best Practices

Student tutorials in Amsterdam: The Dutch project 'Helping hands' sought to help pupils who were falling behind in their schoolwork during the pandemic. In the face of teacher shortages and problems with mobility, the programme did this through peer learning. It enlisted older pupils to tutor younger pupils. A small company (bureau Bijlescontact, Purmerend) facilitated this process by training the older students in tutoring and matching them with the younger students in the Amsterdam region. The tutors and other costs were covered by the national education programme (NPO) as well as by the tutees (at a reduced rate). This was a relatively new initiative, but it seems to have had positive effects. Nonetheless, also the older students have been disadvantaged by the Covid-19 pandemic and have more social-skill difficulties so it is unclear how long the project will continue and whether it will be expanded.

Social care training in Elvas: The municipality of Elvas entered into a partnership with the Employment Institute (Instituto de Emprego e Formação Profissional) to train around 50 employees capable of supporting nursing homes and the Red Cross during the pandemic. Elvas municipality contributed with 10% of the funding and the rest (90%) was provided by the Employment Institute. This action had a positive impact in the city in providing crucial health assistance to an ever-increasing elderly population. The focus area is Elvas municipality. Understandably, the main policy goal is to adjust the local personnel needs for supporting elderly population in health services during the pandemic via training sessions. In large measure, the policy targets the elderly population. It can, of course, end up benefiting other ages. This policy was introduced only at the local level (municipality). In essence, two main entities were involved in implementing this policy: Elvas municipality and the local Employment Institute facility. The policy was implemented successfully and helped to support the elderly population of the municipality. No information was provided in how long this policy will be maintained. Considering the increasing demographic ageing process in this border municipality, one would expect that this policy measure could benefit the elderly population even in post-pandemic times. Furthermore, this measure could be extended to similar EU regions facing demographic challenges. Similar initiatives could have had similar positive impacts in other depopulated and relatively socioeconomic deprived regions.

5.2 Green Transition – Policy Breakdown

Across the case study regions, green transition policies introduced in response to the pandemic are less prominent in number and scope. The pandemic served as a catalyst for speeding up the implementation of existing environmental policies and strategies. Table 4 below provides an overview of the type of green transition policies introduced in the case study regions by policy theme. The crisis has highlighted the need for more green spaces in urban areas, thereby giving further impetus to the recent trend for better green space planning and policies. The pandemic has also accelerated the implementation of existing green transport and mobility policies, such as increasing the number of available bike lanes and pedestrian areas to help reduce the number of citizens commuting and using public transport in order to control infection rates. The closure of borders during the pandemic has given further momentum to green tourism. Regional and local governments have been keen to revive tourism in a manner that allows for economic, social and environmental sustainability. During the crisis, policies have also emerged for educating citizens on sustainable living by advertising and investing in local products and business and teaching children about biodiversity. The green transition policies identified across the cases have largely been driven and supported by regional and local authorities. As there is little direct causality between the pandemic and green transition policies introduced, the case findings suggest that many of these policies have strong medium- and long-term trajectories, as climate-related issues predate and will postdate the pandemic. Table 4 provides an overview of the key policy themes that were identified across the case study areas. Each policy theme is briefly described below the table and illustrated with best-practice examples.

Table 4 Thematic breakdown of green transition policies across case study regions

Policy Theme	Type of Policies
Green and sustainable business support	Policies which support businesses in the transition to a green economy.
Green tourism	Measures aimed at increasing tourist numbers again in a sustainable manner after the drop in tourism during the pandemic.
Climate mitigation and adaptation	Policies which have the goal of reducing emissions and adapting cities to a changing climate.
Travel and mobility	Measures to promote public transport, walking and cycling and to reduce car use and travelling by plane.
Green spaces	Measures and initiatives to increase and maintain publicly accessible green space.
Waste management and circular economy	Policies and measures to promote more sustainable and efficient waste management and the circular economy.
Education, training and research	Policies to increase knowledge on sustainability and biodiversity as well as measures to support research on sustainability topics.

Green and sustainable business support: Regional and local authorities in some case study areas capitalized on the pandemic context by not only supporting businesses financially during the most challenging times, but by also setting incentives and encouraging them to choose more green and sustainable practices, products or services. Public authorities also supported the transition to a green economy by raising awareness of locally and sustainably produced food products.

Green Business Support Best Practice

Veszprém Green processes support for businesses: A specific financial and knowledge support is used to help entrepreneurs apply truly green solutions and set up local companies in the Veszprems-Balaton region that contribute to the green transition (e.g. encouraging food composting businesses, organising awareness-raising trainings for service providers). This measure is introduced at regional level, and implemented by the planner, organiser, and executor of project development (VEB 2023 JSc) of the European Capital of Culture (ECoC) Programme, taking place in the Veszprém-Balaton region in 2023. Although this measure is linked to the development of the ECoC Programme, the existing medium-term commitment of local stakeholders to promote green policies and the involvement of service providers has strengthened during the pandemic period. The continuation or implementing of this measure in other regions is useful due to the long-term spill-over effects.

Malmö Transition Crisis Package: During the pandemic the regional authorities introduced a Transition Crisis Package to support the businesses' transition to become more climate friendly and digitally competent. The aim was to target businesses to help them transition, both digitally and environmentally,

during the pandemic when their activities and operation were low, and they had time to make changes. The policy included support for export to new markets and financing and local crisis coaching which includes business development, networks, seminars, and outreach activities. Green transition is viewed as a long-term change that is beneficial both for the companies and society. In the Transition Crisis Package, the region also worked with the Regional Digital Scorecards to measure the digital maturity within the region's companies. These elements of the policy measure would be beneficial to continue after the pandemic. The work with digital and green transitions within companies have a long way to go and many companies have a lot to gain.

Green tourism: Tourism was one of the sectors most strongly affected during the pandemic. As high rates of infection, travel restrictions and quarantine measures made travelling difficult or impossible, the number of tourists dropped sharply in many destination areas. Several case study regions and municipalities implemented initiatives to revive tourism again after the most challenging times of the pandemic. Nonetheless, these initiatives did not necessarily pursue the goal of increasing tourist numbers to pre-pandemic levels, since these were considered to be unsustainable in some areas. Green tourism strategies, therefore, aimed at reviving tourism in an environmentally, socially and economically sustainable way that would not drain local resources and lead to overcrowding and pollution.

Green Tourism Best Practice

Zero Strategy Barcelona: The "Zero Strategy" is a tourism marketing strategy of the Barcelona Provincial Council that responds to the current needs of the sector. The strategy maintains the spirit of empowerment of tourism that values the destination, focuses on the local level, and respects the environment, guaranteeing social, economic and cultural sustainability. It is focused on supporting the tourism sector in the Barcelona region and carrying out communication and inspiration actions for the final customer, especially in the local market (Catalan, Spanish). The policy was developed in collaboration with other public institutions such as the Catalan Tourism Agency, Turisme de Barcelona and local and regional tourism management agencies. The first phase was dedicated to the local market: the City of Barcelona, its metropolitan area, but also the rest of Catalonia region, trying to transform the need for short trips into opportunities for overnight stays. A second phase targeted nearby markets (Spain, southern France), focused on family tourism that can be done by car during short periods. A third stage, more commercially intense, is dedicated to short vacations in Europe. However, it is attentive to the recovery of other international markets.

Climate mitigation and adaptation: Interviewees in a small number of case study areas also reported that the pandemic context was used to promote climate mitigation or adaptation measures. Examples include measures that promoted energy efficiency and energy savings, investments in renewable energy plants and sharpened goals for reductions in greenhouse gas emissions.

Climate Mitigation and Adaptation Best Practice

Athens energy saving programme: In Athens, the programme "Saving energy/Energy autonomous buildings", adopted at national level, aims at increasing energy savings and promoting the energy autonomy of households. New incentives were set to encourage the production and storage of energy from renewable energy sources and the installation of "smart" energy systems. With a total budget amounting to 632 million euros and mobilising total funds of over 1 billion euros, Greek Energy Efficiency Programme is one of the highest funded ongoing projects of the public sector in Greece. Motivating various fields of the construction and the building materials sector which are connected to renovation and energy upgrade, the programme becomes even more relevant since the current energy crisis intensifies the need for less energy consumption. This initiative will continue in the long-term as energy provision represents a major issue for local authorities.

Travel and mobility: During the pandemic, mobility patterns changed. As quarantine rules and lockdowns were imposed, social distancing requirements and remote work and education were implemented, people spent more time at home, avoided public spaces and spent more time outside. In some areas, the number of public transport passengers decreased and people more frequently chose to move by car or bike. Public authorities in the case study areas used this context to promote more sustainable mobility modes, to develop and invest in public transport and extend bike paths. Some local authorities also revised internal travel guidelines and prioritized digital meetings over physical meetings that involve travelling.

Travel and Mobility Best Practice

Iasi bike sharing initiative: The municipality of Iasi implemented the bike-sharing system VeloCity during the pandemic. The goal was to increase the use of bicycles as a means of travel. Through the project, 50 boarding and rental stations for bicycles were installed and 813 mechanical smart bicycles, 37 electric smart bicycles and 80 tricycles for seniors and people with disabilities were purchased. The project also

included the implementation of an intelligent, energy-independent alternative urban mobility system using smart bicycles, to which docking systems and smart terminals were added. Finance was provided through the Regional Operational Programme 2014-2020. To date, the operation has been a success and further bike lanes will be constructed.

Green Spaces: Travelling was difficult or impossible during large parts of the pandemic and most people spent unusual amounts of time at home in quarantine, social isolation or lockdown. Under these conditions, local green spaces increased in importance as places for recreation and socialization. Local authorities tried to meet the growing demand by increasing investments into the maintenance and protection of green areas, but also by creating additional parks and green lanes.

Green Space Best Practice

Veszprém Parks Initiative: The municipality of Veszprém implemented several initiatives to increase the number of green spaces in the city and improve their quality, targeting the general population. Amongst other measures, the local authority created more parks and green spaces on the University Campus. Recognizing the growing need for a diverse natural environment in the city centre, the initiative also promotes the planting of fruit-bearing trees in wooded park areas to attract more birds. Local, large-scale housing estates could apply for raised beds to encourage community gardening. Three NGOs have been working closely with the municipality (represented mainly by the Public Utility Service of Veszprém) on developing and implementing this policy, not only during the COVID-19 crisis, but based on the growing demands and resources available for developing green spaces.

Waste management and circular economy: Across the case study areas, a few initiatives focused on promoting the circular economy and improving waste management during the pandemic. Examples include the construction of new waste treatment plants in Greece and public information campaigns to improve the separation of waste by households. The pandemic context also required an adjustment of waste pick-up schedules in some case study areas, as businesses produced less waste than usual while private households produced more.

Waste Management and Circular Economy Best Practice

Helsinki circular economy cluster: A new cluster programme for the circular economy was initiated during the pandemic by the City of Helsinki in collaboration with both private and public sector partners. The goal was to enable new entrepreneurship and business opportunities around circularity in the Finnish capital region. The policy was put forward as an applied response to the pandemic-induced economic slowdown, seeking to build system-level competitiveness relative to other city regions by playing to Helsinki's strengths: Well-functioning infrastructure and networks, a safe urban environment, and closeness to nature. The cluster programme also focused on upskilling and leveraging new digital tools and integrated the pandemic-induced social policy dimension through a youth entrepreneurship element conducted in collaboration with regional institutions of higher education. A total of EUR 20 million were reserved in Helsinki's budget for these applied policy responses, EUR 10 million of which specifically for the circularity cluster programme and incubator activities, with the other half directed at speeding up digitalization at the city level.

Barcelona domestic waste management project: The action "How to separate domestic waste during COVID-19?" consisted in the diffusion of visual information to raise awareness of the correct separation of domestic waste during the pandemic. The local government in the region have already applied this type of program and adapted the focus to meet the needs of quarantine conditions: the separation of masks, gloves and other health supplies for people that were positive to COVID-19 and to enforce the correct waste management by households in general in order to reduce waste quantities. The program was short-term in nature and targeted to the general population, applied at a local level and led by the Metropolitan Area of Barcelona.

Education, training, and research: Interviewees in the case study areas also highlighted some initiatives which aimed at increasing public knowledge of sustainability issues during the pandemic, as well as research projects related to sustainable development. The number of such initiatives was, however, small.

Education, Training, and Research Best Practice

Amsterdam regional resilience project: This concerns a research design project to enhance resilience in the built environment, targeted at academics. The financing was set up by the national government. Within this scheme, the municipality of Amsterdam awarded a grant to the Hogeschool van Amsterdam (Amsterdam School of Applied Sciences) to investigate measures against the spread of Covid-19 in public space and assess their sustainability. The research found, for example, that if walls need to be built to physically separate people, this can be done cost effectively by using recycled or recyclable materials rather than

plexiglass. In addition, involving at-risk youth in the process of building structures can contribute to social goals. Another goal of the project was to design a toolbox related to climate change and biodiversity loss which can be applied during pandemics and other future shocks and stressors so that these matters are not ignored. The researchers hope to valorise the findings via applications in public policy and communication. It is too early to tell the impact of this research (which should be completed by 2023), as it concerns awareness raising of potential synergies.

5.3 Smart Transition – Policy Breakdown

The case studies reveal that the COVID-19 crisis has given significant momentum to smart transition policies. The pandemic has forced national, regional and local authorities to speed up pre-existing digitalisation strategies. This specifically involves a focus on promoting policies that enhance citizen access to digital technologies, high speed broadband services and the prioritisation of ongoing processes to digitalise important public services. The digitalisation of healthcare at the local level preceded the pandemic in some areas, but the crisis has served to increase the number of citizens now conducting online healthcare consultations with their local doctors. The pandemic has also been a direct catalyst for the digitalisation of other public services, including mental health provision, legal processes and cultural events. Similarly, e-governance processes have grown in scope, with citizens now using online platforms to communicate with local authorities or perform local administrative tasks, such as the payment of municipal taxes or online citizen registration forms.

The most novel and innovative smart transition during the crisis was in the field of education. The pandemic forced schools and universities to find new and innovative ways to digitalise education by moving teaching online during lockdown periods. This required local authorities to ensure that school children, particularly from lower-income backgrounds, had access to appropriate equipment and internet connection. The pandemic has also given further impetus to multilocality working. This was a trend that was already growing before the pandemic, but the crisis accelerated policies that ensured employees had the digital tools and competencies to make their home office environments comfortable and productive. Enhancing digital competences was also important for teachers who were offered ICT training to perform effective digital classes.

The use of big data to monitor society has become more prominent during the pandemic through the emergence of mobile track-and-trace systems and digital surveillance systems which can monitor the number of citizens in highly populated urban areas. While online education was intended as a short-term policy to protect students from the risk of infection during the pandemic, most of the smart transition policies identified across the case regions have a high longevity potential. The longer the pandemic goes on, the more likely digitalisation processes will continue to be consolidated and expanded into new public service areas. Below, Table 5 provides an overview of the key policy themes that were identified across the case study areas, followed by a brief description and selected best-practice policy examples from the case study areas.

Table 5 Thematic breakdown of smart transition policies across case study regions

Smart Policy Themes	Type of Policies
Business digitalization support	Measures which support businesses in increasing their digital competence and digital offers.
E-governance	Measures which support remote access to municipal information and services (e.g. payments) and digitalise internal local authority management systems.
Digitalization of public services	Initiatives to digitalise key public services including healthcare, mediation, mental health services and cultural events.
Digital access and competencies	Policies that enhance broadband connections and offer IT support including the provision of computers, laptops or routers to keep people connected.
Smart transport	Measures that promote e-ticketing and mobile apps for public transport use.
Multi-locality working, education and training	Policies to facilitate remote working as well as to facilitate digital/remote education during the pandemic.
Big data	Tools that measure the number of pedestrians or users of public transport, and track economic trends, pollution levels, health parameters and other indicators through real-time data to help, for example, regulate citizen traffic and avoid crowded areas.
Research	Projects that support research on digitalization as well as measures to promote research networks and science hubs.

Business digitalization support: Local and regional authorities in the case study areas capitalized on the pandemic by encouraging local businesses to digitalize their offers and services. Authorities, for example, supported businesses in measuring their digital maturity and highlighting steps forward for competence building. They also established online platforms which connected local producers, shop and restaurant owners and allowed them to promote their products and services jointly to the local population. Some local authorities placed specific emphasis on supporting newly launched businesses during the pandemic.

Business Digitalization Support Best Practice

The digital city centre in Corsica: Local businesses have suffered a lot during the COVID-19 crisis with the acceleration of the digitalization of commerce and the spectacular growth of sales on e-commerce sites. The association of merchants of the Bastia region in Corsica has created a digital "city center" (www.compruinbastia.com) in order to support all local businesses. Their priority is to regain the confidence of their customers, proximity and allow them to find everything they are looking for without having to go to the giants of the net. This initiative is therefore aimed at both merchants and their customers. It has been supported by the City of Bastia, the Chamber of Commerce and Industry of Corsica and Haute Corse, the Agglomeration Community of Bastia, the Corsican Region, the Bank of Territories and the Sporting Club of Bastia. This market place is a success because it allows to support the local traders and craftsmen of the city center of Bastia and the surroundings and to better serve the customers. Today, there are already more than 7000 products to discover, 40 merchants already connected, 25 restaurant owners in direct access as well as the possibility to be delivered at home or at the office. This project will continue after the pandemic and will even be developed. A Click & Collect system, a network of relay points as well as a bicycle courier service will be set up soon. This type of initiative is very easy to implement in other cities, especially in small and medium-sized towns that suffer a lot from the decline of their city center businesses.

Support for the digitalization of municipal markets in Barcelona: This business digitalization practice aimed to strengthen the role of municipal markets as suppliers of local fresh products to the general population and to increase its supply and digital presence by expanding the marketing channels and developing online sales platforms. To implement this practice, the Barcelona Provincial Council worked hand in hand with the City Councils of the municipalities of more than 2500 inhabitants. Even if the policy had a short-term nature, its application in other regions could be considered.

E-governance: Many local and regional authorities had already offered specific types of services and tasks via digital tools. The pandemic gave a new boost to these developments and spurred digitalization processes and the setup of e-governance systems. Authorities developed tools which allow citizens, amongst others, to pay taxes, register, obtain signatures and certificates, and express their views on certain issues. Public authorities also digitalized their own internal management systems which made internal work processes more efficient.

E-governance Best Practice

Online Tax Payments in Iasi: In Iasi, the local government implemented an online system for tax payment. The goal was to allow people to avoid having to travel to complete administrative tasks like paying their taxes. The system allows taxpayers (individuals or legal entities) to get information and to pay local taxes through electronic payment instruments. Therefore, the operations can now be made without going to the physical office. This action is still going on and the city of Iasi has registered an increase in the number of users. In a context of digitalization of public services, this type of initiative could be applied in other regions.

Digitalization of public services: In addition to promoting e-governance systems, the pandemic also accelerated the digitalization processes of public services. This included a wide range of offers and services. Services and offers as diverse as court hearings, mental health support, health and social services, and cultural performances were now becoming available and accessible online. The effects of the digitalization and customer satisfaction are often not clear yet, motivating individual research projects on the topic.

Digitalization of Public Services Best Practice

Amsterdam ethics of digital health project: This concerns a research project with the goal of investigating the ethics of e-health, a process which has been greatly accelerated by the pandemic. The financing was provided by the ongoing national ZonMw programme, which supports interdisciplinary research and its application in the area of public health. Stakeholders range from the Ministry of Health, Welfare and Sport (VWS) to researchers and healthcare providers on the ground. The 2020-2024 programme was drawn up in response to the Covid-19 pandemic, including the project on the ethics of e-health. Many healthcare meetings were moved online, such as patient/physician consultations. On the one hand, this raises the question whether patients should have the right to choose between physical and virtual consultations

going forward. In some cases, anonymous online appointments with healthcare professionals may be preferred, such as in cases of psychological issues. On the other hand, it is unclear whether this creates a doctor-patient relationship in a legal sense. It also raises issues of accessibility as some groups may find it more difficult to participate in digital meetings. The project's findings will be available in 2023 and can help to enhance the just aspect of the smart transition.

Digital access and competencies: As public services were moved online during the pandemic, this increased the risk of new inequalities between population groups. Lack of access to stable and fast broadband connections, lack of equipment such as computers and laptops, as well as insecurities in handling new technologies could all potentially exclude certain groups from digital offers and services. In order to reduce the risk of deepening digital divides among local population groups, several regional and local authorities implemented targeted measures. Some offered financial support to vulnerable families in order to buy computers or tablets, while others distributed routers or offered publicly accessible Wi-Fi in public places. Public authorities also supported teachers in increasing their competence in digital education.

Digital Access and Competencies Best Practices

Azores computers for students drive: Local authorities on the Azores offered computers to children from socio-economically deprived households to provide them with the possibility to study from home. This policy action has also had a positive impact on accelerating the digitalization process of public services of the island of Terceira, by significantly reducing the need for socio-economic deprived families to be physically present in the municipality services to take care of intended issues. The focus area was the Terceira Island of the Azores. The main goal of the policy was to bypass economic limitations from many families, which could not afford the acquisition of computers, by giving them this critical technological product which could be used by these families. With this, all students had the possibility to attend classes from home via an internet connection, even in strict lockdown phases. The policy was target to young students of socioeconomically deprived families. As expected, the computers were also available to the remaining family members. As such, persons of all ages benefited by this measure in, for instance, accessing public and private services via online connections. This policy was introduced in all the Island of Terceira (regional level). This initiative was promoted by the two municipalities of the Island, with the support of the Azores government. This initiative was quite successful, as it allowed for a relatively normal functioning of the school classes in the Island, even during the COVID-19 lockdown phases. Moreover, the equipment will continue to be available to the families with potential benefits for other activities like the access to information and services. A similar initiative was implemented in Amsterdam and considered widely successful. Expectedly, this policy measure had a high level of medium and long-term potential to increasing the digitalization processes in the Island in post pandemic times. This could be seen, for instance in increasing home-working and access to digital/online platforms to using public and private services, with all the associated positive impacts: reduced carbon footprint, reduced corruption levels, increase access to information, etc. Similar initiatives could have had similar positive impacts in other depopulated and relatively socioeconomic deprived regions.

Mayotte digital access points: Authorities on Mayotte funded mobile digital access points and opened many *Maison France* services (public service points). The aim is for the whole population to have access to internet connection points and places where they can perform their administrative procedures online (Health, family, retirement, law, housing, taxes, job search, digital support). These measures were greatly accelerated during the COVID-19 crisis. They are still ongoing, with the aim of reducing the very strong digital divide in Mayotte. This action could very well be deployed in other regions. In Mayotte, it is even envisaged that a bus providing the same services would also criss-cross the island to get closer to the users.

Smart transport: In individual case study areas, the pandemic context was also used to implement digital tools in public transport. This included smart apps with real-time data about transport connections and the introduction of contactless payment.

Smart Transport Best Practice

Iasi e-ticketing infrastructures: E-ticketing inside public transport was initiated in Iasi. The objective was to limit contact in a pandemic context. The measure was started by the City Hall and the Public Transport Company. Funding is provided by the EU. E-ticketing had already been functioning (QR, apps, SMS, contactless payments) before the pandemic, but not in an integrated manner. The effects are expected to be positive in terms of increasing the attractiveness of public transportation. Beyond the health aspects, this service also allows for a better monitoring of the use of public transport and to provide mobility services that meet the needs of the population.

Multi-locality working, education and training: Across Europe, the Covid-19 pandemic had strong effects on the working life and education. From the onset of the pandemic, governments and health authorities encouraged all those who could work long-distance to work from home. In addition, large parts of youth and

adult education were moved online. Public authorities at different levels of governance supported this transition with various measures, including compensations for additional power usage at home, distributing routers and providing equipment.

Multi-Locality Working, Education and Training Best Practice

Elvas home office digital equipment provision: The city of Elvas acquired and distributed 300 routers for all municipality residents which had a personal computer in their homes. The goal was to provide conditions for all to work directly from home during the lockdown. The focus area was the municipality of Elvas. The main goal of this initiative was to allow all municipality citizens to connect to the internet. With this, residents could work from home and access online public and private services that were not available previously. Hence many economic activities and services could be maintained in operation even in strict COVID-19 lockdown phases. This initiative targeted municipality (local level) residents with low-income levels. It was fundamentally designed and implemented by the municipality. This measure produced positive long-term impacts on the use of public services by the municipality residents which no longer have to be present at municipality service centers to take care of tasks like requesting municipal documentation or paying fees. These are now done online. Moreover, local students now have the necessary tools to have classes from home. In the medium-long term, this initiative has the potential to motivate the systematic and intensive use of online services by the Elvas residents, with potential positive impacts in several domains: reduced corruption, reduced carbon footprint, and increased access to information. Similar initiatives could have had similar positive impacts in other depopulated and relatively socioeconomic deprived regions.

Milan new software and digital portals: The policies introduced in Italy related to distance learning are mainly directed at the adoption of digital infrastructures aimed at the safe continuation of school and university activities. Specifically, hardware and software systems (new software and digital e-learning portals) were upgraded in order to allow (during the various periods of the emergency in total or partial form) the distance delivery of educational activities. The adoption of this measure allowed school and university activities to be conducted, respecting the teaching calendar. The measures, therefore, were taken to facilitate digital distance education during the pandemic and support students in difficulty, aiming to decrease the digital divide. The policies for overcoming the digital divide have been implemented by universities and educational institutions in collaboration with political institutions on a national scale and have led to a greater understanding of the potential offered by digital technologies in the sphere of learning. Increased awareness in the student population and teaching staff, reconciled with the recognition of the fundamental role of face-to-face teaching, has led to its consolidation in the medium to long-term throughout the country.

Big data: The pandemic also gave a boost to the use of big data in local and regional authorities. New tools and technologies allowed municipalities to monitor the number and density of pedestrians in crowded areas and public transport, and to track the impact of the pandemic in terms of health, mobility, economic performance and pollution levels.

Big Data Best Practice

Amsterdam crowd monitoring system: This project seeks to curtail the spread of infectious diseases through the crowding of people. Amsterdam's Crowd Monitoring System Amsterdam (CMSA) uses counting cameras and Wi-Fi sensors to give insight into numbers and densities of pedestrians in public spaces. The municipality decided to set up this system itself, rather leave it up to the private sector, to ensure privacy, transparency and the public interest. An algorithm on the CMSA server analyses how many people are on the images and converts this into anonymous statistics. This is then forwarded to municipal officials to regulate traffic, if needed. The public are also informed about the level of crowdedness via signs (e.g. digital billboards) or online. The stakeholders include the municipal departments of traffic and public space and the businesses Tapp and Life-electronic (who developed and built the system). CMSA was originally used in 2015 during the international event SAIL Amsterdam and is now being used permanently at Dam square, Arena boulevard, and in the Red Light District. Although operational, practice has so far shown that it was not sufficient to provide people with adequate real-time information. Post-pandemic, the CMSA can be adapted to other uses, such as monitoring cycling traffic to improve infrastructure planning.

Hannover dashboard: The Region of Hannover developed an online dashboard to keep citizens informed about the evolution of the pandemic. This included up-to-date information on the number of infections, recovered patients and cases of death at local level. The dashboard was built to be as comprehensive as possible and easy to use, showing clear data on a map, with colour split. The dashboard covered the integrity of Hannover region with a zoom function for each locality. The dashboard was updated daily (and, as of September 2022 it still is) with data provided by local health authorities, due to an increased collaboration between the health departments and local/regional decision-makers. The dashboard managed to provide up-to-date and reliable information for inhabitants at a more granular level (local) regarding the virus spread and risk of infection. While its use is less intense than in 2020 or 2021, despite its daily update, the dashboard represents an easy-to-reactivate tool in the eventuality of a new wave or another health risk, providing a useful solution for medium-term.

Research: Interviewees in a few case study areas also reported that research projects are being conducted on digitalization processes, the use of digital platforms in governance, and the future of the workplace. Local and regional authorities also increased connections and dialogue with research centres and science hubs to discuss solutions to new challenges.

Research Best Practice

Researcher dialogue platform in Helsinki: A 'Situation Room' for economic and social science research was established in the city of Helsinki during the pandemic. This entailed a joint research group that brought together leading experts from the Helsinki Graduate School of Economics (a research consortium between Helsinki's universities), the national VATT Centre for Economic Research, and other relevant stakeholders with expertise in statistics and policy monitoring at the local and national level. The aim of the new research group was to support local policymakers with regular reports to improve data-driven decision making. Researchers made use of a variety of available public and private data sources, as especially registry and administrative data is well documented in the Helsinki area and was made available for the purpose of policy analysis. Regular reports were published related to the pandemic-induced recession and its impacts on the labour market, households and firms.

5.4 Common trends in the Covid-19 regional policy response: new momentum for social, green, and smart transition policies

A diverse range of social, green and smart transition policies have emerged in response to the crisis, as outlined above and in Annex 1. Some general policy development trends can be identified across the case study regions, which are outlined in more detail below.

Social policies focused on societies' most vulnerable groups: The pandemic has served to further highlight and exacerbate existing socio-economic inequalities across EU regions. The crisis has hit the most vulnerable groups in society hardest; consequently, many of the social policies introduced across the case study regions were targeted at groups most at risk from the effects of the pandemic, including the older adults, children, low-income families, and the homeless. Future national, regional, and municipal strategies/policies need to continue focusing on these target groups to help reduce regional socio-economic inequalities and ensure no one gets left behind by the short, medium, and long-term impacts of the crisis, especially citizens in low-income households, working in service sector jobs, and the long-term unemployed.

Social policies helped to mitigate the worst socio-economic effects of the crisis: Policymakers interviewed across the case study regions expressed the view that it is too early to judge the impact of the individual social policy measures introduced during the crisis. They also observed that it is too difficult to measure causality between the social policy measures implemented and emerging socio-economic trends at the regional and local levels. There was, however, agreement that the social policies introduced did help to mitigate the worst socio-economic challenges presented by the crisis. Economic and business support measures kept businesses open, and citizens employed, thereby limiting the socio-economic damage that would have been caused by widespread business closures and redundancies.

Social policies reactive to the socio-economic challenges presented by the pandemic: Policymakers in the Amsterdam case study region noted that the magnitude, scale, and urgency of the crisis meant that a swift and strong response to immediate health and social challenges was prioritized over medium and long-term policy goals. Those social policies that were introduced were largely reactive to the socio-economic challenges presented by the pandemic. The economic and business support policies identified across the case regions were short-term in nature, as policymakers noted that high levels of public expenditure cannot be sustained over a long period. Furthermore, many of the social policy measures introduced were halted once lockdowns were ended, such as additional home support for the elderly and vulnerable families.

Social policies have long-term potential: Many of the social policies introduced in response to the pandemic have long-term potential. The pandemic is still not over, and the threat of further life-threatening variants remains. Moreover, the short, medium, and long-term socio-economic consequences of the crisis may be intensified by austerity measures and tax rises introduced to offset the high levels of public spending debt incurred during the pandemic. In addition, the socio-economic challenges posed by Covid-19 have been further exacerbated by the cost-of-living crisis and energy crisis currently engulfing Europe. The most vulnerable groups in society will be hit hardest as these concomitant crises develop; consequently, it will be necessary for national, regional, and local authorities to consider reinstating, or continuing, many of the social policies introduced during the pandemic. Social policies targeted at society's most vulnerable citizens (e.g. the young, elderly, homeless and low-income families) will be particularly important. For example, policies introduced in Elvas, the Azores and Barcelona targeted at providing rent reductions and financial support for water and energy bills could also help vulnerable groups counter growing living costs.

Covid-19 has been a catalyst for renewal and reform of regional and local health and social care strategies: Years of austerity and underfunding prior to the pandemic left many regional and local health and social care providers ill-equipped, understaffed and lacking the infrastructure to cope with the scale of the crisis. In some of the case regions, the pandemic forced regional and local actors to develop new health and social care strategies and policies designed to reorganize existing infrastructure to be able to cope with future threats of this nature. For example, in the Barcelona region, a health care contingency plan was developed by local authorities so municipal public health care services would have access to the necessary procedures, organization and resources required to guarantee citizens the provision of effective health care services during future pandemics. In the Lombardy region, regional health laws are being rewritten to adapt the delivery of health and social care to the local context and offer services in closer proximity to citizens living in more rural and mountainous areas.

The crisis has given momentum to proactive green and smart policy trends: Interviewees in the Lombardy and Amsterdam case study regions noted that the epidemic gave momentum to green and smart policies already under development or under consideration prior to the pandemic. Digitalisation and sustainable environmental policy trends have accelerated and gained higher prioritisation. The case studies highlight that the crisis further stimulated smart policies related to digitalisation processes focused on developing e-governance tools and the online delivery of key public services. Policymakers noted that these digitalisation processes will be consolidated, with increased multilocality working likely becoming a major long-term policy trend to emerge from the pandemic. The case studies also reveal medium and long-term potential in relation to certain green policies, including increases in green public spaces in urban areas, and the construction of more bike lanes and pedestrian areas in cities. The cases also point to a predicted growth in policies related to local green tourism, as well as the use of sustainable food production and other local business services and products.

Regional resilience and crisis management policies are becoming more prominent: Prior to the pandemic, the concept of regional resilience was becoming increasingly salient in policy and academic circles. Regional resilience examines how capable local and regional economies are of recovering from exogenous and endogenous (global and local) shocks and threats to ensure long-term policy development paths. The COVID-19 crisis has given this notion further impetus and relevance. In response to the crisis, many public authorities across the case regions developed regional resilience and crisis management plans to cope with the crisis or ensure that policymakers and practitioners are ready for future crises. A primary example of this came from the Barcelona region where the regional government (Generalitat de Catalunya) developed the CORECO plan focused on public sector economic reactivation and social protection measures to overcome the socio-economic challenges of the pandemic. In Lombardy, a new regional law has been introduced that lays the preparation for a regional pandemic plan and the establishment of a Centre for the Prevention and Control of Infectious Diseases. Similarly, in Corsica, the Salvezza Plan outlined emergency actions needed to safeguard island businesses, economic activities and mitigate social challenges.

6 Covid-19: a catalyst for collaborative governance

Across the case study regions, the crisis had a major impact on multi-level governance policy making processes, institutional structures and stakeholder collaboration practices. The unique circumstances of the pandemic have created some governance challenges, particularly in cross-border regions where border closures disrupted the free flow of people, goods and services. At the same time, however, the pandemic also served as a catalyst for promoting collaborative governance, as policymakers were required to work closely with experts and other key local stakeholder groups to develop and implement policies that met the needs of citizens. Different types of collaborative governance were identified in each case study region between various institutional levels (national, regional and local) and different stakeholders. These examples are outlined below and illustrated with best practice examples.

Inter-institutional collaboration increased during the crisis: The crisis has given impetus to greater collaboration between local level institutions manifested in increased interregional and intermunicipal cooperation. Inter-institutional collaboration came in the form of both informal and more formalized cooperation activities across the case study regions. For example, informal collaboration between regional and local authorities was important for sharing healthcare provisions across borders and administrative boundaries. This was particularly the case in cross-border regions like Elvas and Malmo where it was noted that the pandemic led to greater dialogue between regional and municipal-level authorities to share cross-border healthcare responsibilities to avoid the duplication of efforts and promote the sharing of resources. In many regions, more formalized inter-institutional arrangements could also be found. In Barcelona, a formal agreement was made between local authorities to develop economic diversification strategies. Such formal collaboration was also evident in the Azores where in the municipality of Angra do Heroismo, 19 parishes worked together to establish a joint action plan for dealing with the challenges presented by the pandemic. The socio-economic fallout of the pandemic and the cost-of-living crisis could potentially lead to further austerity and finance cuts, so the social capital built up between local governance levels during the pandemic will lay the foundation for more extensive and innovative interregional and intermunicipal collaboration in the future to help share costs and improve policy delivery.

Inter-institutional Collaboration Best Practices

Barcelona Collaboration Agreement: After the two first waves of the pandemic, public institutions were more able to detect changes in aspects such as employment, working conditions, production, distribution, and consumption systems and their respective impacts on the industry, trade, catering, transports, and the public health system. This context reinforced the need to collaborate with different local and regional institutions. In the region, three of the main governance institutions, the Provincial Council of Barcelona, the Metropolitan Area of Barcelona (AMB) and the City Council of Barcelona signed a collaboration agreement with the aim of working together on the development of policies and the achievement of objectives related to the economic reactivation of the territory. In this sense, the three entities agreed to share a common strategy with actions for each of the current priorities. The agreement, now valid until 2024 but it is supposed to be extended.

Helsinki Healthcare Collaboration: In Helsinki, the pandemic triggered notable developments in collaboration between regional and local authorities in the delivery of health and social care. The City of Helsinki enacted several new digital tools for data sharing with the healthcare authority of Uusimaa Region. Prior to the pandemic, information on patient numbers, treatments, and patient records could not be shared across the different healthcare authorities, as no mechanism for sharing had been established and as medical records platforms and databases were mutually incompatible. There had also been a lack of momentum for enhanced collaboration in organisational terms. However, the external shock of the pandemic crisis and the need to harmonise resources and healthcare capacity brought on an array of new data-sharing and collaborative initiatives between the different public healthcare providers, even partially involving private and workplace healthcare providers. The initiatives were coordinated by newly-established joint subcommittees, connecting members from different units of the healthcare administrations. The applied measures were thus targeted both at aligning and bridging key elements of the administrative organisation and infrastructure networks of the healthcare providers, and at enhancing strategic communication among healthcare personnel. While it is unclear whether most of the applied changes and alignment will remain in place in the long term, it is clear that the pandemic-induced measures have laid the foundations for greater dialogue and interaction between authorities post-pandemic.

Azores Parish Action Plan: In the municipality of Angra do Heroismo, 19 parishes worked together to establish a joint action plan for dealing with the challenges presented by the pandemic. The main goal of this inter-institutional sound collaboration was to provide an immediate solution to the most relevant socioeconomic problems faced by the island dwellers resulting from the pandemic. Concrete actions were materialised via direct financial support, and provision of food/medicines to families in need. Economic activities were also supported by financial measures like tax reductions/cuts. In the end, all the population and economic activities from Angra do Heroismo

municipality (local level) were targeted by this Action Plan. As expected, the elaboration of this Action Plan not only involved the municipality, but also relevant social and economic stakeholders like economic activities associations (industry and agriculture), as well as the Azores government. The implementation of the Plan was, however, mostly done by the municipality and each of its 19 parishes. In the end, in the Azores, all the political forces and key institutions put their political divergences behind them and provided an eloquent positive example of proactive linear cooperation towards solving concrete socioeconomic challenges posed by the pandemic in the Azores. As a result, the implementation of this Action Plan can be considered to be quite successful since it prevented social unrest and the dismantling of several economic activities in the Island, including the ones associated with tourism related activities. This Action Plan was specifically designed to cope with the devastating consequences of the COVID-19 pandemic. It is no longer being fully implemented and probably will only be replicated in a similar pandemic crisis. It can be taken as a positive example to be replicated in other socioeconomic deprived EU regions, and in particular in Islands.

Enhanced cross-party political cooperation: The pandemic increased cross-party political cooperation as regional and municipal level politicians were required to put aside competing political interests and work together for the collective common good. In the Barcelona case region, Deputy Mayor of Esplugues del Llobregat, Pilar Diaz, noted that 'the pandemic has brought out the best in people and made all politicians and elected officials work closely together to find solutions, leaving aside the interests of each political party.' The Elvas case region also noted that the crisis has resulted in increased cooperation across political parties, with traditionally politically opposed groups working together.

Increased interdepartmental cooperation within regional and local authorities: The case studies indicate that the crisis created conditions in which different policy departments had to work together more closely to share resources and develop policies to cope with the pandemic. This was particularly evident in the Helsinki case region where public authority representatives highlighted that the pandemic has led to a more holistic management approaches based on cross-departmental collaboration and dialogue. New working groups have been established across divisions within the City administration which would not have been convened before the pandemic with equal awareness of the importance of harmonizing efforts. This has been particularly clear with regards to, for example, the healthcare sector, where more cross-sectional working groups and information sharing practices are in place, and in city planning and sustainable development, where a wider range of divisions and sections are involved in collaborative dialogue to make policies as action-oriented and as holistically applicable as possible.

Collaboration between institutions and stakeholders: Enhanced collaboration between regional and local public authority institutions and other key sectoral groups and stakeholders has been a regular feature throughout the pandemic. Across the case regions, three main types of institutional-stakeholder collaboration have been predominant during the crisis; firstly, cooperation between public authorities, healthcare, and societal groups; secondly, collaboration between public authorities and local industries and businesses; and thirdly, collaboration between public authorities and local universities and research institutes. In several case study regions, increased dialogue between local authorities, healthcare providers and civil society groups was considered essential for implementing healthcare measures and social policies for vulnerable groups. In Helsinki, there was increased dialogue between public authorities and experts at local universities in looking for solutions to challenges presented by the crisis. In Amsterdam, a programme was established that brought together municipal authorities, healthcare providers and insurance companies to devise measures to help meet increasing healthcare demands more effectively and efficiently. In the Malmo case, the regional development department worked closely with the industry cluster to support businesses that wanted to take their processes and productions in new directions as a result of the pandemic. Similarly, in the Iasi case region, a platform was established together with a civil society organization composed of researchers to enhance urban-rural linkages and establish connections between local food producers.

Institutional-Stakeholder Collaboration Best Practices

The Third Sector Board in Barcelona: One of the most active social stakeholders in the region of Barcelona, the Third Sector Board (la Taula del Tercer Sector), a public institution that represents and brings together more than 3,000 non-profit social entities, has played an important role in the region in conducting short- and long-term analyses and helping to develop strategies and policies during the crisis. One example of their implication and collaboration with the different governance institutions are the collaboration with the Metropolitan Area of Barcelona in the development of the Metropolitan Plan to support social cohesion, the local economy and the co-production of services (ApropAMB) in the municipalities of the region to deal with the challenge posed by COVID-19 with the funding of several actions and initiatives related to the recovery of social and economic fabrics through the production and co-production of public policies, both with municipal initiatives and in collaboration projects with associations and entities operating in the territory and represented by the Third Sector Board. Here the role of the Third Sector board was crucial as they can more easily identify the vulnerable groups of the population. These collaborations will be certainly extended and the participation of the stakeholders in the governance plans could be more relevant in the following years.

Amsterdam healthcare partnership: The Vitaal Gezond [Vital Healthy] Programme seeks to promote collaboration between municipal authorities, healthcare providers and insurers. It is intended to improve the workings over the overall public health system in the face of structural challenges such as ageing and health inequality. It targets itself to the following social groups: the chronically ill, youth and families, mental health patients and the elderly. One of its goals, for example, is to add ten years of health to the most disadvantaged in the Amsterdam region. The partners are the municipality of Amsterdam, insurer Zilveren Kruis, the regional umbrella of organizations active in health and welfare Sigra as well as NGOs for patient interests (Cliëntenbelang Amsterdam) and health and public welfare (Elaa). The programme was given greater urgency during the Covid-19 pandemic and the partnership was mobilized to find immediate solutions to short-term problems like free parking for healthcare workers. The interviewed participants were very positive about its functioning as it provides a platform for these interdependent parties to collaborate. This programme existed before Covid-19 and will continue on afterwards.

Malmö Industry Cluster: During the pandemic, the regional development department increased their cooperation with the industry cluster organisation IUC Syd. The aim was to help identify areas of opportunity for regional innovation, diversification and support industries to get their products to market. The cooperation between the Region and IUC Syd is not new, but the pandemic visualised an increased need for the region to reach companies through the cluster. IUC Syd is a strong player in the region. It is an industrial development centre with the task of strengthening growth and competitiveness in industrial companies in the Scania area. They are a member-owned organisation with no profit interest of their own. During the pandemic they, among other things, worked to support industries who wanted to transform their production to something useful during the pandemic. The region and the region's companies would benefit from this increased cooperation with the cluster also after the pandemic.

Helsinki Elderly Care Initiative: In Helsinki, an inter-institutional initiative, 'Helsinki Aid', was taken at the start of the pandemic to coordinate that every senior citizen in Helsinki over the age of 70 is contacted by phone. The aim of the initiative was to map out and record the needs of the particularly vulnerable demographic of senior citizens, who had been advised by national restrictions to shield and stay at home as much as possible. The initiative also provided senior citizens, many of whom live alone and were thus socially isolated by the stay-at-home instruction, with an additional opportunity for some social interaction and pastoral support over the phone, as well as being able to more smoothly direct specific requirements to those bodies implementing home support and callouts. The collaboration brought together public authorities in the City of Helsinki organisation and the healthcare administration with several other local and national level stakeholders, including private companies, NGOs and religious organisations. City officials, as well as employees from NGOs and church parishes thus set out to contact every senior citizen in Helsinki, gaining information about their circumstances and what forms of support they required. It is notable that this specific initiative, while induced by the pandemic and particularly by the difficulties of the early-stage pandemic restrictions, contributed in a unique way to increase the breadth and extent of collaborative partnership among different sectors and administrative bodies in Helsinki. While operating in similar areas of social care, these organisations would not conventionally have been prone to pool their resources and increase inter-stakeholder communication to the extent that they did within a short timeframe. While the particular measure in place was linked to the unprecedented circumstances of needing to reach out to senior citizens 'stranded' at home, particularly to senior citizens in single-person households, the initiative has thus introduced more inter-stakeholder collaboration to Helsinki's social and elderly care sector, with potential for building more lasting partnerships for the future.

Business Cooperation in the Azores: The pandemic increased collaboration between Azores municipalities, the Câmara do Comércio (Chamber of Commerce) and the Agriculture Association. The focus area of this initiative was the Azores Islands. The main goal of this policy was to improve policy effectiveness and efficiency by incorporating the main needs of economic players in policy design and implementation. Ultimately, the policy targeted both business and the local administration level (municipalities). All interested business stakeholders were involved in the initiative via their associations, as well as all interested municipalities. The participation and role of business groups in municipal policymaking processes was particularly significant in the development of policies to mitigate the effects of the crisis on businesses and tourism. This collaboration significantly impacted the design of the municipality strategy to combat the pandemic-related economic challenges in a fragile socio-economic context. Moreover, this collaboration is due to be reinforced in post-pandemic times and can be replicated in similar territorial contexts. The potential to continue implementing similar initiatives is huge since it ended up reinforcing institutional networks and had mutual beneficial gains.

Digital Inclusion drive in Corsica: In the context of the health crisis linked to Covid 19, it is necessary to respond to the needs of vulnerable people facing confinement and deprived of means of connection and equipment. This initiative aims to respond to the need to: (i) telephone and/or be connected to the Internet to obtain information, access rights, access remote care or alert in case of emergency, which is a vital necessity in this period of pandemic; (ii) provide access to equipment by offering 300 SIM cards with prepaid recharge, 100 standard cell phones and 100 smartphones for people in very precarious situations. This policy is supported by the Corsica Region, which has joined the #connexionurgence initiative with the Emmaus Connect Association. The Corsica Region plays the role of assembler of the #connexionurgence initiative for Corsica. It is in charge of coordinating and distributing the equipment provided by the Emmaus Connect association and the cell phone operator SFR to the local stakeholders. This initiative has enabled young people living in very precarious situations to continue taking online courses. This type of operation can be replicated in other regions but will not be repeated after the pandemic.

Tourist Industry Collaboration in Athens: Tourism is an essential element of Athens' economy which was hit badly during the pandemic. Public authorities worked closely with the Hellenic Chamber of Hotels to ensure that tourism-related policies met the needs of hotels and businesses in the industry. The objective was to design an attractiveness policy that would enable the city's tourism economy to be put back on track. It was also a question of thinking about how to make the city's tourism more competitive. Many businesses and public sector stakeholders were able to sit around the table and define a tourism strategy as part of the broader Athens Resilience Strategy for 2030.

VEB 2023 ECoC Project Veszprem: The Veszprém-Balaton 2023 European Capital of Culture project has strengthened cooperation between local-level actors (not just representatives of local authorities, but NGOs, local businesses, citizens etc.) in Veszprem-Balaton region, which is particularly valuable in a centralised governmental system, where horizontal cooperation and regionality is to be enhanced. The project introduced during the crisis fosters links between municipal programmes and encourages cooperation and coordination between participants in the organization of local cultural events. The project has also provided a platform for knowledge sharing and interaction between municipal authority representatives and local communities, so relations have been strengthened in the field of reorganising and rethinking cultural events. The modus operandi can be implemented in other policy themes and in other spatial contexts.

Increased stakeholder and societal group action: The emergence of stakeholder and community-led actions and social innovation activities has been a common feature across the case study areas. The crisis has enhanced the role of third sector organisations and associations in policymaking, with the role of societal groups and voluntary initiatives viewed as important in supporting public authorities in the implementation of regional and local policies that meet the needs of citizens. For example, one initiative in the Helsinki case study region saw collaboration between private companies, NGOs and religious organisations in providing additional support for senior citizens. Community-led action has been especially significant in more centralised systems of governance, where the policy scope of regional and local authorities is weakened by predominantly top-down national-level policy structures. Ongoing third sector involvement in policymaking will be essential moving forward to ensure that the most vulnerable groups in society are not left behind by just, green and smart transitions. In Veszprem, societal group actions are also an important factor for green policies. Three NGOs are working closely with the local authority to promote initiatives on urban vegetation, environmental awareness-raising, amongst other topics.

Stakeholder and Societal Group Action Best Practice Examples

Lelekter Foundation Veszprem: In Veszprem city, third sector organisations worked closely with municipal authorities during the crisis. Local NGOs, the Maltese Relief Centre and Red Cross played important crisis management roles. Also, a network of volunteers helps people in need, supports and reliefs efforts during the first wave of pandemic. Lelekter Foundation, initially dedicated to helping youth, had coordinated volunteers to help the elderly, in close cooperation with the social institution of the local municipality, and also reallocated voluntary networks under construction in connection with the Veszprem-Balaton 2023 European Capital of Culture Programme. Although volunteer support for the elderly was phased out after the first wave, because there was no demand from the public, volunteers and the experience gained from the organising of volunteer networks is maintained and can be used flexibly to support other activities.

Taste of Iasi B2C Platform: The Taste of Iasi B2C platform was a bottom-up initiative by an NGO and researchers which received funding from the City Hall. The platform was designed to enhance urban-rural linkages and establish connections between local food producers across different regions. By 2021, the platform included 78 local food producers from the North-East regions of Romania. This platform still exists and could be deployed in other regions. It has strengthened the links between the producer and the consumer.

University Entrepreneurship in Corsica: Some students started their own business just before the pandemic. This crisis put their project into question. It is in this context that the objective of the University of Corsica's policy was to support its student entrepreneurs. The university has developed a program for drafting entrepreneurship dashboards. These dashboards provided advice to young entrepreneurs and a platform for innovators to develop new ideas and exchange information. They provided guidance in all areas, from marketing and financing to the more technical aspects and networking. This initiative helped strengthen the PEPITE cluster of the University (incubator created in 2014). Far from being limited to training entrepreneurs during the COVID-19 crisis, this program aims to widely develop the entrepreneurial culture among students. This initiative has helped to raise awareness of the PEPITE cluster as well. This is reflected in a synergy between island actors (institutions, professional organizations, support structures, funders) and the structuring of actions and training related to entrepreneurship. Recently, the President of the University has renewed his wish to support students who have decided to start an entrepreneurial venture.

Social and Solidary Economy Corsica: The social and solidarity economy (SSE) is recognized as a major player in the economic and social growth of the territory. It plays a predominant role in rural areas, where its response to local needs is not limited to job creation but is also a vector of social ties and local services. As the leading employer in rural areas, the Social and Solidarity Economy is today the only form of private and local economy that reaches the most disadvantaged areas. However, the health and social crisis has had

consequences on the associative fabric. The Corsican Region has acted on their financial situation by facilitating the payment of 2019 subsidy balances and 2020 installments. A single point of entry has been specially created to provide rapid and appropriate responses to the processing of applications and the need for information. The Corsican Region has also offered zero interest cash loans via Corse Active pour l'Initiative (CAPI). The Collectivity of Corsica has already mobilized 375 000 € for this purpose. Complementarity is also sought with the general national measures taken in application of the health emergency law (delays in payment of tax and/or social security due dates, remission of direct taxes, partial unemployment schemes, National Solidarity Fund). Aware of the excessively long payment deadlines and the consequences that this can have for the SSE, the Corsican Region will continue with this scheme beyond the crisis.

Regional leadership: The case studies show that regional and local institutions and stakeholders working within decentralised national governance structures had the mandate and responsibility to coordinate and adapt policy responses. Within highly centralised national governance systems, however, regional and local actors had little influence and scope regarding developing local policies but were still essential for the effective delivery of national-level policies. These findings indicate that a stronger role for subnational-level actors is needed at the agenda-setting stage within centralised governance structures to ensure that regional resilience and crisis policies meet the needs of local citizens. This requires an emphasis on promoting regional leadership and providing local actors with the capacity and resources needed to develop and implement a place-based response.

Regional resilience and crisis management units: A direct consequence of the pandemic has been the emergence of new regional resilience and crisis management policy units at the regional and local levels. These new infrastructures have been created to bring together policymakers, regional stakeholders, and researchers to manage the crisis and prepare for future crises. For example, in the Milan case study, the impact of the virus led to the creation of crisis units to strengthen cooperation between the municipal authorities, health care providers and other emergency services during crisis periods.

Crisis Management Units Best Practice

Lombardy Crisis Management Units: Among the policies adopted by the Lombardy Region in managing the Covid-19 emergency is the activation of a crisis unit and a task force to manage the pandemic. In fact, on 12 March 2020 - with the Decree of the Secretary General number 3287/2020, Annex A - the Region formalised the establishment of the crisis unit (made up of 154 members), which was already operational in the first days of the emergency, and of the regional task force, i.e., a smaller organisation within the General Directorate for Welfare. These measures were introduced to favour the pooling of information in regional governance, in particular between institutional subjects and the operational structures of the health system, in order to favour the coordination of actions and policies; an important part concerned communication with citizens. The crisis unit, in addition to the members of the regional administration, involved in the membership employees of companies in which the Lombardy Region has a stake and subjects from the university and health sector and scientific research institutes. This policy represented the regional scale governance formula linked to the health emergency aimed at maximising system efficiency. The emergency nature of this policy, active in the first wave of the Covid-19 pandemic (March 2020), and in subsequent epidemic waves, rules out its presence in the post-pandemic period.

Iasi County Emergency Committee: The Iasi County Emergency Committee was established to help implement policies and measures to deal with the crisis. The Committee was predominantly established to implement central government decisions but was also required to respond to urgent local needs. The Committee integrated stakeholders from across different sectors, thereby helping to foster collaboration between public authorities, civil society groups, NGOs and private companies. Weekly meetings were held. Today, this committee has been disbanded but the stakeholders have agreed that they will re-establish it in the event of a crisis.

Policy-expertise interfaces: The crisis has exposed tensions between the role of public authority representatives and independent experts in policymaking processes. The relationship between politics and expertise has often been blurred during the pandemic, highlighting the need to reassess how scientific advice to policymakers is structured and used. Moving forward, it is imperative that expert bodies and other scientific advisors retain their independence and the ability to challenge political decisions on the basis of objective scientific advice. This is essential for ensuring the integrity of policies communicated to the public and limiting the potential spread of misinformation.

Scientific Advice Platform Best Practice

Lombardy Technical and Scientific Committee: During the pandemic, the Lombardy Region played a fundamental role in the management of the Covid-19 emergency: in fact, among other things, it set up the crisis unit and brought together appropriate skills to provide operational support to the central purchasing bodies, the university scientific technical committee and the task force. In particular, on 7 April 2020, the Lombardy Scientific Technical Committee (Comitato Tecnico Scientifico - CTS) was established by the Directorate General for

Welfare; a structure composed of twenty-six figures with high medical-scientific skills. The CTS - made up of experts and qualified representatives of local authorities and administrations - played a key role in the regional-scale management of the Coronavirus emergency, providing support and advice to the activities of the regional decision-making and administrative structures during the most intense phases of the pandemic emergency. The Scientific and Technical Committee's mission, supporting regional governance decisions, ended with the termination of the Covid-19 pandemic state of emergency.

7 Exploring territorial trends: cross-border challenges and rural revitalization

The case studies explored the policy response to the crisis across a range of different types of regions, including urban, rural, coastal, and cross-border areas. This section of the report highlights some of the key impacts of the pandemic within different territorial contexts.

Local institutions and actors in cross-border regions restrained by top-down national level decision to close borders: Transnational and cross-border cooperation has been challenged by the pandemic. The decision of national governments to shut down borders has posed significant obstacles for people living in cross-border regions such as Elvas, Iasi, and Malmö. Regional and local authorities have been largely absent and neglected in these decision-making processes, and this has had a major impact on cross-border labour commuters and businesses that rely on the free flow of people, goods, and services. During the pandemic, cross-border committees and regional and local authorities in cross-border areas have played an important role in trying to retain social capital between cross-border institutions and actors while attempting to put pressure on national governments to reduce the formal and informal barriers presented by border closures and other pandemic rules. For example, Elvas and Badajoz authorities came together to exert pressure on their national governments to open borders. In cross-border regions like Elvas and Malmö, the pandemic also led to greater dialogue between regional and municipal-level authorities in the management of cross-border healthcare responsibilities and sharing medical resources. In future crisis periods, there is a need for greater dialogue between national governments and regional and local authorities in cross-border areas. This is required to ensure that any national-level policy measures introduced take into account cross-border contexts and do not negatively impact on citizens and businesses in these areas.

Improved transport mobility and better digital broadband connections essential for rural revitalization processes: The crisis has resulted in significant changes in mobility trends across European regions. The pandemic has been a catalyst for counter-urbanisation with people moving away from urban areas to rural areas due to the opportunity to work remotely or from second homes which are often located in rural areas. These developments lay the foundation for the revitalisation of rural areas; however, regeneration processes are largely dependent on improved urban-rural transport mobility connections and digital broadband infrastructures, which are essential for remote work and encouraging businesses to remain in or set up in rural areas. Establishing strong links between urban areas and mountainous regions was a significant issue in the Lombardy region. In Lombardy, policymakers noted that many issues and questions, such as transport mobility, road access, and health care provisions, should consider the distinctive features of local areas by activating aggregating facilities between urban areas and mountain areas to strengthen the public services in mountain communities.

Exploring new opportunities for agriculture and sustainable food production in island and rural regions: A noticeable policy trend across the island territories was the protection of agriculture producers. In Mayotte, Corsica and the Azores, agricultural associations were proactively included in policymaking decisions to help protect food producers and explore opportunities for sustainable food production. Similarly, in the rural region of Iasi, the Taste of Iasi B2C Platform was developed to help connect food producers in the region.

8 The emergence of new crisis management financial measures across governance levels

A range of different financial measures have been introduced to cope with the socio-economic challenges of the pandemic. Policymakers across all levels of governance responded to the financial challenges presented by the crisis through the introduction of new fiscal measures designed to keep businesses open and reduce the threat of widespread unemployment. This section of the report outlines some of the key findings related to the novel financial measures introduced during the crisis.

Sub-national level institutions, stakeholders, and citizens need a stronger role in determining the direction of spending of new EU crisis recovery funds: Several case study reports outlined the significance of the emergency funding provided by the EU Next Generation Recovery Fund in helping regions bounce back from the crisis. The EU Just Transition Fund is also considered important for stimulating post-pandemic regional growth and development in the most deprived and vulnerable EU regions. Policymakers interviewed noted that it is essential that regional and local actors play a central role in determining how this money should be spent to ensure that funding meets the most pressing needs of regional citizens. The last case study region emphasized the need for more inclusive financial planning processes and exploring the potential of participatory budgeting techniques for enhancing citizen involvement in local financial planning.

National government funding essential for limiting socio-economic damage: Across all case regions, national-level funding was crucial for financing social policies, including economic and business support measures, designed to mitigate the worst socioeconomic challenges of the pandemic. Only national governments had the mandate and money to finance policies such as furlough schemes, increases in welfare provision and unemployment benefits, and compensation for loss of earnings. These policy measures are not, however, sustainable in the long term due to their impact on public debt. Policymakers interviewed, therefore, pointed out that it is important that any future national level pandemic recovery funds are targeted at the most vulnerable regions and groups.

Diversification of regional and local funding measures to support businesses and vulnerable groups: In many case study areas, regional and local authorities supplemented national level financial grants/loans with additional economic and business support measures at the sub-national level; this was mainly in case regions within nation states with a decentralised system of governance. Regional and local financial social support measures came in the form of rate relief, such as moratoriums on municipal taxes and rents. In Amsterdam, for example, the local authority delayed deadlines for the payment of taxes on large events until 2023. It also did not collect fees for using public land (e.g. from sidewalk cafés) during 2020-2022 and offered a postponement for the payment of municipal tax to taxis and car-sharing companies during the first months of the pandemic. Similarly, the municipalities of Elvas (Alentejo) and Terceira (Azores) supported businesses by eliminating or reducing fees and taxes to be paid by commercial actors to the municipality. Helsinki supported struggling businesses by relieving rent payments for business properties owned by the city. In addition to supporting struggling businesses, the case study areas also implemented various measures to aid vulnerable families. This includes Barcelona, where a moratorium for rent payment of apartments was established for the months April and May 2020, with further measures planned to support families in case of need. Elvas removed the duty to pay water bills for the poorest families. These different financial support measures tended to be short term in nature and usually ended once societies reopened. The extent to which such measures could be taken up again in case of need is largely dependent on the long-term financial implications of the pandemic and the ongoing energy crisis, which will severely impact the availability of regional and local revenues.

Limited private funding for policy initiatives: No examples of private funding for policy initiatives were discovered across the case study regions. This is not surprising given that the crisis placed both large industries/businesses and SMEs under financial strain, with many relying on government support to cover furlough costs and loss of earnings. The uncertainty and financial cost of the crisis did not create the conditions for private funding initiatives and investments. The current economic downturn and cost of living crisis will potentially lead to further cuts in public funding and, as a result, regional and local public authorities might need to consider innovative ways of incentivizing larger private industries and businesses to finance important just, green and smart transition strategies and policies at the sub-national level.

Public funding measures introduced to support innovation and transition processes at the regional and local levels: As traditional industries and service sectors were hit hardest during the crisis due to lockdowns and supply chain issues, several regional and local authorities provided financial incentives to enhance business innovation and entrepreneurial activities. For example, in Helsinki, funding packages were introduced targeted at business incubators and youth employment and entrepreneurship initiatives.

Innovative funding initiatives emerged during the crisis: In some case study regions, money was raised locally by or with the support of community organisations, local associations and volunteer groups. Crowdsourcing and other public donation techniques were used to raise funds for regional initiatives and support volunteers in their work with vulnerable groups. For example, in the Barcelona case area, local authorities relied on additional funds raised by societal associations in collaboration with other volunteer organisations. Facing budget cuts, the Veszprem municipal authority set up a public donations account with funding going towards measures to control the spread of the virus. The account received HUF 6.1 million in 2020 and a further HUF 500,000 in 2021. The Veszprem municipality also set up a joint-stock company (VEB 2023 JSC) with the local authorities of Veszprem and other municipalities as majority shareholders. Businesses, NGOs and citizens bought shares as well. This specific form of funding has encouraged local authorities to cooperate and involve different types of local level actors. Community-level funding of this nature may be considered a best practice for helping local authorities overcome predicted revenue cuts. However, financial support from citizens may become increasingly difficult to obtain as the cost of living and energy crisis continues to engulf Europe.



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