Innovation in Local Public Administrations at the European Level
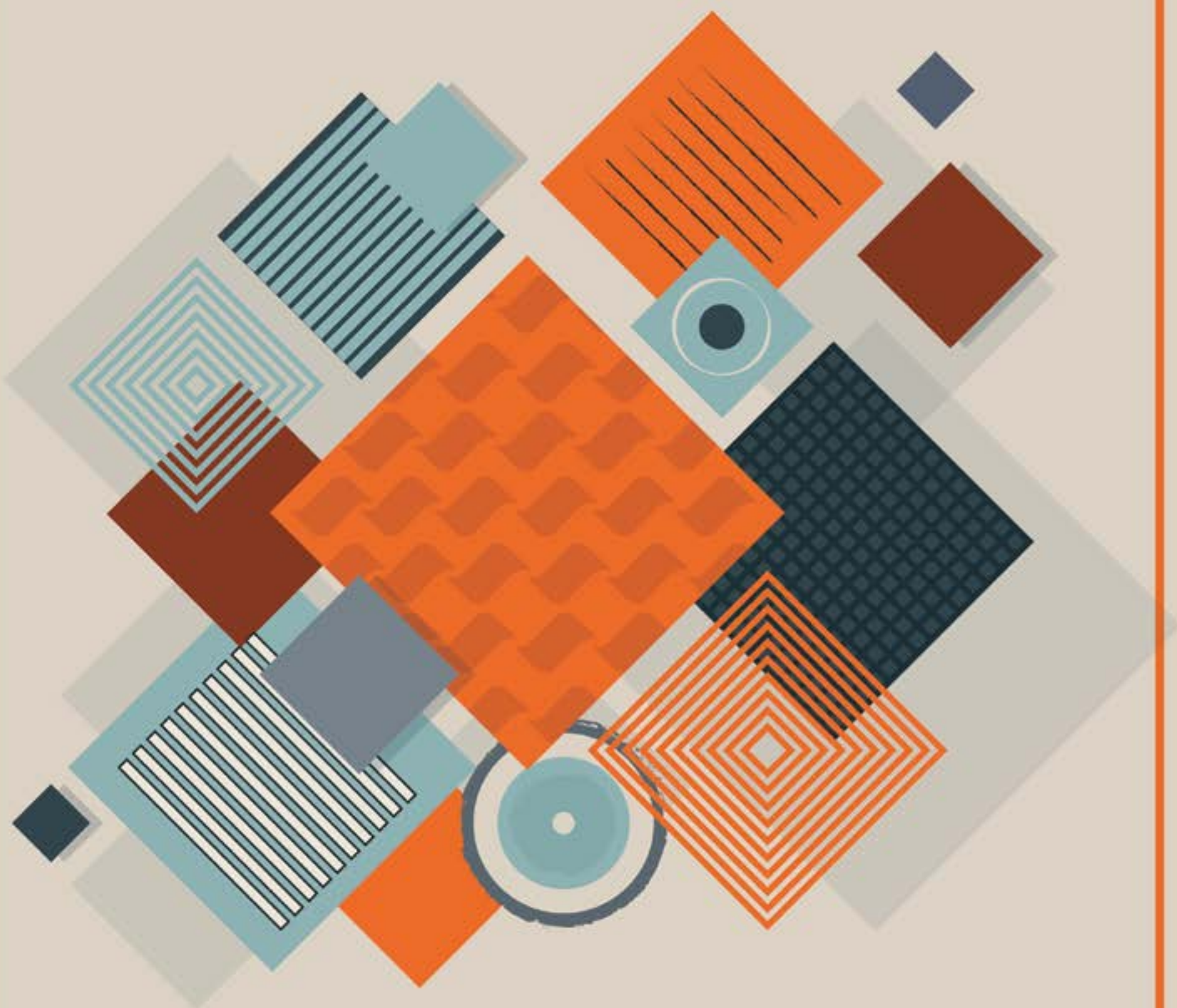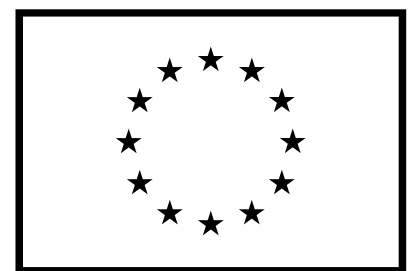
A BENCHMARKING REPORT ON BEST AND NEW PRACTICES

**Funded by
the European Union**

Foreword

The Bragança Polytechnic University in Portugal (IPB), in collaboration with the Foundation for Studies and Training in Local Administration (FEFAL), the National Institute of Administration (INA, I. P.), the City University of Applied Sciences Bremen in Germany (HSB), and the Silesian University in Opava in the Czech Republic (SUO), are spearheading a project to thoroughly analyze the culture of innovation in local public administration. This project also aims to develop cutting-edge training programs to enhance local public services, tailored to meet the needs of citizens and economic agents.

In our globalized and highly competitive world, innovation has become essential for both businesses and organizations. This is particularly true in the public sector, where local governments are increasingly relying on innovative strategies to foster economic and social development, tackle challenges, and improve responsiveness. Innovation in the public sector is also crucial for meeting the demands and expectations of an informed, participatory, and demanding citizenry. As such, it remains a top priority.

Through this report, we seek to identify the challenges in fostering a culture of innovation within the public sector and to determine the necessary skills for its successful implementation.

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Structure of Local Public Administration

Before delving into innovation within European local governments, it is essential to understand the distinct structures of local public administration in Portugal, Germany, and Czechia. These structures vary significantly due to each country's unique historical, cultural, and political contexts.

PORTUGAL

The Portuguese Republic, a democratic nation governed by the 1976 Constitution, operates under a unique unitary state structure divided into three governance levels: central, regional (including the Autonomous Regions of Azores and Madeira), and local. Locally, there are municipalities (municípios) and parishes (freguesias), both of which have been democratically elected since 1976, marking a pivotal shift in Portugal's governance post-dictatorship.

Portugal has 308 municipalities — 278 on the mainland, 19 in the Azores, and 11 in Madeira. Additionally, the country comprises 3,092 parishes — 2,882 on the mainland, 156 in the Azores, and 54 in Madeira. Nearly all municipalities are further subdivided into parishes.

Since the establishment of democratic local administration in 1976, municipalities have included a deliberative body, the municipal assembly (Assembleia Municipal), which oversees the activities of the municipal council (Câmara Municipal), the executive branch of the municipality. The municipal assembly consists of directly elected members and the presidents of the parish executive bodies. The assembly elects its board, comprising a president and two secretaries. The municipal council, led by the mayor (Presidente da Câmara Municipal), is elected by direct universal suffrage every four years.

Municipalities have a wide range of responsibilities defined by law, including: Rural and urban infrastructure; Energy; Transport and communications; Education, vocational education, and training; Heritage, culture, and science; Leisure and sport; Health; Social welfare; Housing; Civil protection; Environment, drainage, and sanitation; Consumer protection; Promoting development; Territory and urban planning; Municipal police; External cooperation.

Parishes have their own administrative systems. The parish assembly (Assembleia de Freguesia) is elected by direct universal suffrage for four-year terms using a proportional representation system. The parish executive body (Junta de Freguesia) is elected from within the parish assembly and is tasked with implementing assembly decisions. The parish president chairs the executive committee (Presidente da Junta de Freguesia). Parishes' responsibilities, as defined by law, include: Rural and urban infrastructure; Water supply; Education; Culture, leisure, and sport; Primary health care; Social welfare; Civil protection; Environment and well-being; Development; Urban and rural planning; Community protection.

GERMANY

The Federal Republic of Germany is a federal state with two levels of government: the federal level and 16 federal states, known as Länder. Each Land has its own unique organizational traditions, including at the municipal level. Larger Länder, such as North Rhine-Westphalia and Bavaria, have governmental departments (Regierungsbezirke) and two municipal levels: county (Landkreis) and city or local community (Stadt oder Gemeinde). Others, like Lower Saxony, have only the Land level and two municipal levels. The city-states of Berlin, Bremen, and Hamburg have distinctive structures, with Bremen comprising the cities of Bremen and Bremerhaven. Bremen combines state and local levels, whereas Bremerhaven has its own municipal institutions. Some cities are independent of any county, and there are also associations of municipalities. Hanover, the capital of Lower Saxony, has a unique arrangement called 'Region Hannover,' which merges city and county functions in specific administrative fields while maintaining local municipalities.

Each Land's 'Municipal Constitution Act' (Kommunalverfassungsgesetz) defines the organizational rules for municipalities. Additionally, Germany's federal constitutional document, the 'Basic Law' (Grundgesetz),

includes legal norms on the municipalities' relationship with the state. Article 28, paragraph 2 of the Basic Law, guarantees municipalities' right to autonomy and self-administration.

The internal structure of municipal governments varies by Land, based on state constitutions and municipal regulations. Despite federalist autonomy, municipal constitutions in Germany can be categorized by structure.

Following German reunification, the South German council constitution model became prevalent in many Länder, with Hesse and Bremerhaven maintaining a magistrate-based system. A magistrate is a collegial body where the mayor acts as primus inter pares (first among equals) rather than a sole leader; in non-city municipalities, this body is the municipal council (Gemeindevorstand).

The South German council constitution, applied in Bavaria, Baden-Württemberg, Lower Saxony, North Rhine-Westphalia, Rhineland-Palatinate, Schleswig-Holstein, Saarland, and Saxony, grants the mayor significant authority. Typically, the mayor is directly elected by the public, presides over the municipal or city council (Gemeinderat or Stadtrat), and serves as both the top administrative head and the highest representative of the municipality. The municipal or city council, also directly elected, is another key governing body.

Brandenburg deviates from this model by having the municipal council elect a chairperson (Vorsitzender or Vorsitzende) from its members, along with deputies (Beigeordnete) who manage administration under the mayor's guidance. In Saxony-Anhalt, the municipal council appoints decision-making and advisory committees, chaired by the mayor. Mecklenburg-Vorpommern has directly elected mayors who chair the main and advisory committees but are not council members. In Thuringia, the council can elect a chairperson from its ranks to preside over the council instead of the mayor. In North Rhine-Westphalia, the mayor chairs both the council and the main committee by virtue of office.

Hessen's municipal constitution distinguishes between citizenry and administration. The population elects both the magistrate or municipal council and the mayor, who heads the administration alongside deputies elected by the council, operating on the collegial principle. In Bremerhaven, the city council appoints the mayor.

CZECHIA

The Czech Republic is a unitary state comprising 14 self-governing regions, including the Capital of Prague, which holds the same status as the other regions, and 6,249 self-governing municipalities (ČSÚ). The structure of regional and local authorities has evolved under the influence of several significant factors. The most impactful was the collapse of the communist regime in Czechoslovakia in 1989, which triggered major political, economic, and social transformations in Central and Eastern

Europe. The first democratic governments in Czechoslovakia implemented reforms to expand democratic standards, significantly impacting the regional and local governance structures.

Under the regional reforms of 1960, introduced by the Communist government, all existing regions were abolished. At the same time, the system consisted of two tiers of public administration: local municipalities and regional districts. In the fall of 1990, new local elections took place, and subsequent developments demonstrated that democratic life could be successfully reintroduced at the local level.

During the last decade of communist rule, there was a strong push to reduce the number of municipalities, with authorities compelling smaller municipalities to merge into larger ones. However, in the early stages of democratization, moderate laws were passed, allowing previously merged municipalities to re-establish themselves. Many local communities took advantage of this, leading to increased fragmentation in the municipal structure of the Czech Republic.

Another crucial turning point was the dissolution of Czechoslovakia in 1992, which resulted in the establishment of two independent states on January 1, 1993. The Czech Republic adopted a new constitution in December 1992, recognizing the urgent need for reforms in the regional and local administrative structures. The 1993 constitution referenced public administration institutions, which were gradually established in the years that followed. A critical issue during this period was determining the appropriate allocation of competencies to lower levels of public administration. These challenges gained particular significance during pre-accession negotiations with the European Union, which required further public administration reforms, especially in regional and local governance.

Reforms in public administration were introduced gradually, reflecting consensus among moderate democratic parties in the 1990s. These reforms can be divided into three phases: (1) the renewal of self-governance and public administration (1990–1992), (2) an interim period of reforms (1992–1997), and (3) a period of major reforms (1997–2006) (Vomlela, Hušek et al., 2014, p. 28).

As noted, the local community structure in the Czech Republic is highly fragmented. There are 6,249 self-governing municipalities, with smaller ones predominating. According to 2021 data from the Czech Statistical Office (Český statistický úřad, ČSÚ), 1,400 municipalities have populations under 199, while 1,990 municipalities have between 200 and 499 inhabitants. Together, these two categories account for over 54% of all municipalities. Another 1,373 municipalities have populations between 500 and 999, meaning that over 76% of all municipalities in the Czech Republic have fewer than 1,000 inhabitants. This fragmented structure, dominated by small municipalities, significantly impacts their professional performance. Limited municipal budgets, due to small populations, have necessitated measures to enhance efficiency.

Municipal governance is regulated by the Municipalities Act No. 128/2000 Coll., which defines the status and competencies of municipalities and their bodies. The Act distinguishes between independent and delegated competencies and allows municipalities to collaborate to improve efficiency in performing their independent functions. According to Kadečka (2012, p. 123), such cooperation can take various forms: a) agreements for fulfilling specific tasks; b) agreements to create voluntary associations of municipalities ("dobrovolný svazek obcí"); or, c) the establishment of a separate legal entity by two or more municipalities.

1.1 Innovation Local Public Policies

Innovation is not merely an important aspect but a necessity for shaping public policies that foster regional development. By introducing new approaches, technologies, and practices, these policies aim to enhance economic, social, and environmental growth, creating a foundation for sustainable progress and improving citizens' quality of life (OECD, 2009). In today's globalized world, innovation is not just critical but essential for survival, driving local development, influencing international relations, and enhancing the global competitiveness of regions. As such, public innovation policies play a crucial role in adapting and strengthening local economies to thrive in a constantly evolving global landscape (Dowbor et al., 2010).

The complexity of the innovation process—encompassing multiple actors and requiring a supportive institutional and organizational framework—highlights the need to consider the unique characteristics of each region. Lundvall et al. (2005) emphasize that knowledge and learning are fundamental economic resources for developing dynamic and competitive capabilities.
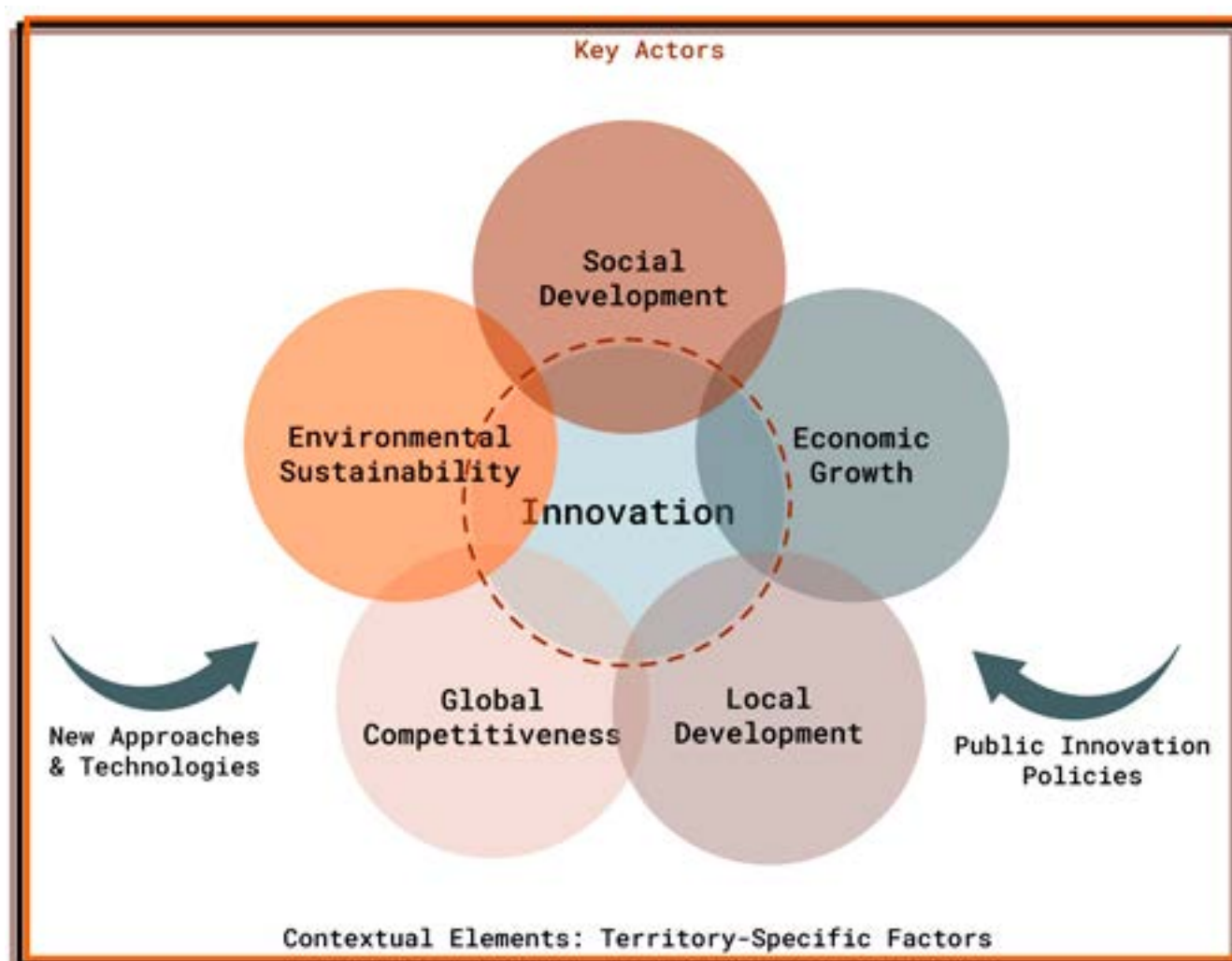
In **PORTUGAL**, as in many other countries, numerous policies and programs have been implemented to promote innovation across various sectors and levels of governance. These efforts are vital for ensuring the country's competitiveness in an increasingly knowledge- and technology-driven world (Teles, 2021). The Portuguese government has shown a strong commitment to fostering innovation in the public sector through various strategies and initiatives.

A prime example is the **Portugal 2020 Programme**, which, between 2014 and 2020, directed European funds toward innovation and business development. This program highlights the country's dedication to advancing innovation. Key initiatives within the program include Compete 2020, which provides financial incentives for innovation projects and company internationalization, and the Competitiveness and Internationalisation Operational Programme, which supports scientific and technological research.

The government's commitment is further demonstrated by the **National Productive Innovation Plan**, designed to enhance company competitiveness by promoting digitalization and the adoption of advanced technologies in production processes. Additionally, the **Simplex+ Program** and **Simplex for municipalities** underscore the government's recognition of the importance of administrative simplification. These programs aim to reduce bureaucracy and improve the relationship between citizens and the state, thereby facilitating innovation in both companies and public administration.

Another significant initiative is the **Strategy for Innovation and Modernization of the State and Public Administration 2020-2023**. Within this strategy, Axis IV focuses on enhancing proximity through four strategic objectives: promoting integration and inclusion in service delivery, encouraging citizen participation, deepening the decentralization of competencies to local authorities, and strengthening public services at the local level, particularly through the deconcentration of services to the regional level.

Promoting **innovative practices within municipalities** is essential, as these are the hubs where everyday life unfolds and where citizens' needs are most directly observed and addressed (Fagerberg, 2017). This proximity enables a deeper understanding of local economic and social conditions and facilitates the implementation of tailored solutions. In Portugal, municipalities play a vital role in advancing public innovation policies.

Notable examples include **smart city initiatives** in municipalities such as Lisbon, Porto, and Guimarães, where technological solutions are integrated to improve urban management and citizens' quality of life. Municipalities have also established **Innovation Support Funds**, such as Lisbon's Social Innovation Fund, which finances projects with a positive social impact. Additionally, programs like StartUp Lisboa and StartUp Braga foster local innovation and entrepreneurship.

Finally, **Municipal Innovation Centers** are worth highlighting. Facilities such as FabLab Lisboa and the Aveiro Business Innovation Centre serve as municipal hubs dedicated to fostering innovation.

At the federal level in **GERMANY**, the German Government has reoriented its research and innovation policy through the "**Future Research and Innovation Strategy**". This strategy aims to protect natural resources, secure Germany's international competitiveness, strengthen societal resilience, and enhance economic strength. The government has outlined six key missions:

1. Enabling a competitive industry characterized by resource efficiency, circularity, and sustainable mobility.

2. Advancing climate protection, climate adaptation, food security, and biodiversity conservation.

3. Improving health for all.

4. Securing Germany's and Europe's digital and technological sovereignty and leveraging the potential of digitalization.

5. Strengthening the space sector, exploring, protecting, and sustainably using space and oceans.

6. Fostering societal resilience, diversity, and cohesion.

These missions are executed by six dedicated mission teams, comprising representatives from various Federal Ministries. The "**Forum Zukunft Strategie**" oversees the implementation of the "Future Research and Innovation Strategy" (Die Bundesregierung, 2023).

The **German states** have also developed their own innovation strategies. **Bremen**, for example, introduced the **Innovation Strategy 2030**, which focuses on intelligent, sustainable, and socially responsible growth by integrating industrial, innovation, and service policies. This strategy addresses the effects of demographic change, digitization, climate change, and environmentally friendly economic activities, all of which impact production and service chains. Bremen has identified five key innovation areas:

1. Sustainable economic activity and resource use,

2. Networked and adaptive industry,

3. Mobility of the future,

4. Intelligent services, and

5. Digital transformation.

Innovation in these areas will be driven by cross-sector networks, experimental spaces, SME and start-up-oriented innovation promotion, as well as innovation-related specialist training and organizational development (Freie Hansestadt Bremen, 2021).

Bremen is also an active member of the **Eurocities network**, committed to sustainability and innovation. The city is engaged in major urban planning and development projects that address climate change and emphasize sustainable urban expansion, green infrastructure, and modern public spaces. Noteworthy projects include:

1. The Waterfront Project: Redeveloping the Weser River waterfront to include green spaces, recreational areas, and sustainable buildings.

2. Green Building Standards: Mandating eco-friendly construction practices for all new developments.

3. The Eco-District Project: Creating neighborhoods that prioritize renewable energy, waste reduction, and sustainable living.

4. The Green River Project: Using smart sensors to monitor and improve the Weser River's water quality.

5. Intelligent Traffic Management: Utilizing real-time data to reduce traffic congestion and enhance public transportation systems.

Innovation at the municipal level in Germany is actively supported by federal programs such as "**Kommunen innovativ**" and "**REGION.innovativ-Kreislaufwirtschaft**". The **Federal Ministry of Education and Research** funds research partnerships in municipalities and experimental spaces, particularly in structurally weak regions. These programs emphasize the role of municipalities as initiators, partners, and beneficiaries of research, development, and innovation. Municipalities and their collaborators receive funding to test innovative approaches aimed at enhancing public services and aligning them with sustainable development goals.

The "**REGION.innovativ-Kreislaufwirtschaft**" program focuses on promoting circular value creation across municipalities to advance regional development. One example is the "CarboMass" project, which explores a regional circular economy for the local reuse of sewage sludge and biomass with optimized CO2 balancing. This initiative, supported by the municipalities of Landgemeinde Stadt Bleicherode and Landkreis Nordhausen in the state of Saxony-Anhalt, has received federal funding to implement its innovative solutions.

Public policies play a central role in shaping modern democratic states, fostering dialogue among citizens, experts, and governments. In the **CZECH REPUBLIC**, as in many other democracies, **public policy innovation** has become increasingly significant in addressing contemporary challenges. In a globalized world where geographic borders no longer hinder cooperation or competition, Czechia has recognized the need to modernize its public policies to tackle demographic issues such as an aging population and low birth rates. These challenges require **cohesive public policies** designed to minimize their impact while fostering sustainable growth.

The importance of public policy is evident in its evolution as a multidisciplinary field since the 1960s, drawing from sociology, political science, economics, law, and public administration. In the Czech context, **public policy research** focuses on the processes of policy creation, examining their causes, rationales, and outcomes. It seeks to address both "what political actors should do" and how to implement effective solutions. This approach combines descriptive-analytical methods with practical applications (Portal of Public Policy, 2016).

A key prerequisite for innovation — whether in markets or public administration — is the integration of new knowledge and entrepreneurial spirit. In the Czech Republic, this includes leveraging research and development, strategic information about markets and customer needs, and efficient internal processes. Long-term innovation success depends on robust basic research, which generates the knowledge necessary to expand technological and social possibilities. Reflecting this, the Czech national **Innovation Strategy** prioritizes areas such as excellent research, knowledge transfer between academia and industry, innovative entrepreneurship, and fostering individuals as agents of change.

However, innovation is not limited to the private sector. In the Czech Republic, public administration plays a crucial role in creating a culture of innovation. Systematic efforts to **modernize governance structures** and **empower local institutions** have emerged as strategic priorities. For instance, the Czech public administration has committed to fostering innovation through **collaborative practices and modernized policies**. These efforts align with international initiatives, such as the **OECD Declaration on Public Sector Innovation** signed by 35 member states, including Czechia, on May 22, 2019. This declaration outlines shared principles and provides a common language to support and expand innovation across public sectors.

Despite these commitments, the Czech Republic faces challenges in implementing systematic innovation within its public administration. Efforts are often sporadic, driven by political priorities rather than institutional frameworks. Employees frequently lack incentives to propose new ideas or innovative practices. To address these issues, Czechia has incorporated "building an innovation culture in public administration" into its **Client-Oriented Public Administration 2030 concept**. This initiative seeks to establish a more structured approach to innovation, ensuring that public administration can respond effectively to emerging challenges and opportunities.

(1.2) Benchmarking: conceptual framework and methodologies

Benchmarking has been a key strategy in the public sector since the 1980s, as highlighted by the OECD (1996). It facilitates the measurement and comparison of the effectiveness, efficiency, and quality of government services against benchmark practices in other organizations. Today, benchmarking is fundamental to modernization and administrative innovation, driving the continuous improvement of public services. This approach involves a detailed analysis of best practices, which can be adapted to meet the unique needs of each public entity. The primary objectives are to enhance service delivery, increase operational effectiveness, and reduce costs. Rather than simply replicating external practices, benchmarking encourages creative adaptation to local contexts (Reis & Reis, 2005).

By learning from proven experiences, public entities can better understand the processes that lead to high performance in leading organizations. Accenture (2006) underscores that the benefits of benchmarking are significant, as it contributes to innovation, improved performance, and fosters a culture of excellence and continuous learning. Ultimately, benchmarking enhances the quality of public services and strengthens the operational response capacity of public administrations.

This report on best and emerging practices in innovation within local public administrations across Europe focuses on **three key dimensions**: **environmental sustainability**, **diversity and inclusion**, and **citizen participation**. In the environmental sustainability dimension, we have identified innovative practices that range from efficient waste management to the integration of renewable energy sources in public services. Projects centered on green infrastructure, awareness campaigns, and incentives for adopting sustainable mobility also stand out as successful initiatives. In the realm of diversity and inclusion, we emphasize programs that promote equal opportunities, ensuring that all citizens–regardless of origin or gender–can fully participate in society. Lastly, in the citizenship participation dimension, we highlight how certain cities have developed effective mechanisms to actively involve citizens in decision-making processes.

Citizenship participation

Diversity and inclusion

Environmental sustainability

We employed a **benchmarking methodology** aimed at identifying exemplary practices in local governments across Europe. This approach consists of two main components. First, we utilized the Observatory of Public Sector Innovation (OPSI) website, a platform renowned for its extensive database on public sector innovations. By leveraging OPSI, we accessed a wide range of case studies showcasing innovative practices adopted by European local governments across various domains. This was crucial in identifying and analyzing the most relevant and successful initiatives. Second, we directly contacted municipalities known for their innovative practices. This involved reviewing municipal development and management plans to pinpoint pioneering public policies and programs. Throughout the report, we illustrate how these benchmarking practices can be adapted to different municipal contexts, promoting the adoption of innovative strategies that enhance citizens' quality of life.

"The world as we have created it is a process of our thinking. It cannot be changed without changing our thinking."

— ALBERT EINSTEIN (1934) «THE WORLD AS I SEE IT»

2

ENVIRONMENTAL SUSTAINABILITY

Best and New Practices on Environmental Sustainability

CONTEXTUALIZATION

Sustainability in the public sector is essential for promoting sustainable development and inspiring other spheres of society to adopt responsible practices. Governments and public institutions play a fundamental role in implementing policies and actions aimed at environmental conservation and resource efficiency. Adopting sustainable practices in the public sector not only contributes to environmental preservation but can also result in cost savings and improved quality of life for the population. One of the main sustainable practices in the public sector is the implementation of sustainable public procurement policies. This involves purchasing products and services that have a lower environmental impact throughout their lifecycle, from production to disposal. Governments can prioritise the purchase of recycled materials, products with ecological

certifications, and services that promote sustainability, encouraging suppliers to adopt greener practices. Another important area is the efficient management of energy and water. Public institutions can invest in energy-efficient technologies, such as the installation of solar panels, LED lighting systems, and low-energy consumption equipment.

Additionally, the implementation of water management programs, including the reuse of greywater and the installation of water-saving devices, can significantly reduce the consumption of this vital resource.

Sustainable mobility is also a priority in the public sector. Promoting public transportation, creating bike lanes, and implementing carpooling programs are some measures that can reduce greenhouse gas emissions and improve air quality in cities. The transition to fleets of electric or hybrid vehicles in public

institutions is also an increasingly adopted sustainable practice. Solid waste management is another area where the public sector can make a difference. Implementing recycling and composting programs, promoting the reduction of single-use plastics, and educating the population about the importance of waste separation are practices that can decrease the amount of waste sent to landfills and contribute to the circular economy. The construction and maintenance of sustainable public buildings is a practice that can generate significant environmental and economic benefits. Green buildings, which use sustainable materials, have efficient resource management systems, and promote the health and well-being of occupants, are examples of how the public sector can lead by example.

In addition to these practices, it is essential for governments to promote policies and legislation that encourage sustainability in all sectors of society. Creating tax incentives for companies and individuals who adopt sustainable practices, strict regulation of polluting activities, and support for environmental conservation projects are measures that can have a significant impact.

Finally, environmental education and awareness in the public sector are fundamental. Educational campaigns, training programs, and the inclusion of sustainability-related topics in school curricula can create a culture of environmental responsibility and inspire future generations to protect the planet. In summary, adopting sustainable practices in the public sector is vital for promoting a more balanced and responsible development. Governments and public institutions have the power and responsibility to lead the transition to a more sustainable future by implementing policies and actions that preserve the environment and promote the well-being of all citizens.

#1

TITLE OF PROJECT / CASE STUDY

BiodiverCities – A roadmap to enhance the biodiversity and green infrastructure of European cities by 2030

Short description:

BiodiverCities aimed to enhance civil society participation in local and urban decision-making, leading to building a joint vision of the green city of tomorrow shared among citizens, scientists and policy-makers. The project collected practices on how to engage citizens in co-creating visions around urban nature, monitoring, and solutions to improve urban biodiversity in the fields of planning and policy-making. It also contributed to the mapping of ecosystem services and assessment of how urban green infrastructure can be used to provide local benefits for people and nature, by contributing to enhance regional biodiversity.

Best and new innovative practice:

Through a public "Call for an expression of interest", the BiodiverCities project selected ten cities to experiment with participatory and innovative approaches to enhance biodiversity in urban areas. The cities included Valongo (Portugal) and Lisbon (Portugal), among others. BiodiverCities was centred on co-creation as a pivotal element in urban planning and policymaking for biodiversity. In this spirit, ten participatory and innovative experiments took shape, with different focuses: from mapping of swifts to establishing a new culture of biodiversity, re-framing the relationship between humans and nature. Yet, they shared the aim to empower citizens to co-create policies that are fit-for-purpose.

Why is this the best and new innovative practice? The main public output of BiodiverCities is the "BiodiverCities Atlas: A participatory guide to building urban biodiverse futures", presenting the different case-studies and sharing highlights, challenges, including institutional, and lessons learnt of the local engagement processes. All projects, carried out in the ten cities involved, are reported on the Community of Practice website.

Results/ Outcomes/ Impacts: The main public output of BiodiverCities is the "BiodiverCities Atlas: A participatory guide to building urban biodiverse futures", presenting the different case-studies and sharing highlights, challenges, including institutional, and lessons learnt of the local engagement processes. All projects, carried out in the ten cities involved, are reported on the Community of Practice website.

Municipality, Country: Leiden, Netherlands; Palma Spain; Valongo, Portugal; Vilnius, Lithuania; Maribor, Slovenia; Novi Sad, Serbia; Palermo, Italy; Regalbuto, Italy; Varese, Italy; and Lisbon, Portugal.

Source #1

#2

TITLE OF PROJECT / CASE STUDY

Lisboa Bike Sharing

Short description:

The introduction of bike-sharing systems in Lisbon has been a success, promoting sustainable mobility and reducing traffic congestion. This project can serve as an example of how to promote transport.

Best and new innovative practice:

The project is committed to improving mobility in the city of Lisbon by promoting means of transport that reduce dependence on cars, encouraging car-sharing solutions with the use of environmentally friendly vehicles. With more users and uses than individual vehicles, they help to reduce traffic and pollution in cities.

Why is this the best and new innovative practice? The Lisboa Bike Sharing project is considered the best and new innovative practice because it effectively reduces traffic congestion and pollution by promoting eco-friendly transportation. Its success lies in integrating a large network of electric and conventional bikes, fostering sustainable mobility and decreasing car dependency in an urban setting.

Results/ Outcomes/ Impacts: Final phase of the project, a network of 1,410 bicycles (940 electric and 470 conventional) distributed among 140 stations.

Municipality, Country: Lisbon, Portugal.

Source #2

#3

TITLE OF PROJECT / CASE STUDY

Águeda Smart City

Short description:

The main aim of the "Águeda Smart City" project is to promote sustainable development and improve citizens' quality of life through the adoption of smart technologies. This includes improvements in the provision of public services, energy efficiency, urban mobility and citizen participation.

Best and new innovative practice:

The project involves the implementation of advanced technologies in various areas, such as intelligent street lighting, waste management, environmental monitoring, public transport and internet access. This allows for more efficient and sustainable management of urban resources.

Why is this the best and new innovative practice? The Águeda Smart City project is considered the best and new innovative practice because it leverages cutting-edge technologies to enhance urban living. By integrating intelligent street lighting, efficient waste management, and environmental monitoring, the project ensures sustainable resource management. Its success in attracting significant investment and international recognition highlights its effectiveness and impact.

Results/ Outcomes/ Impacts: The success of the "Águeda Smart City" project has attracted investment to the city, both from the private sector and from public institutions and international financiers. In addition, the international recognition of the city as an example of good practice in smart and sustainable cities could increase its visibility and prestige globally.

Municipality, Country: Águeda, Portugal.

Source #3

#4

TITLE OF PROJECT / CASE STUDY

Air, noise and traffic (real-time)

Short description:

In the city of Leiria, it is possible to have permanent information on the quality of the air through lamps with sensors installed on urban islands, a system that provides data on temperature, humidity, noise and traffic.

Best and new innovative practice:

In addition to this technological dimension, the lamps are integrated into urban islands, equipped with urban furniture, a bench and a flower box, constituting a kind of archipelago/route of urban comfort. This solution is not exclusive to Leiria, having been implemented in several cities in Portugal and abroad, such as Cascais, Matosinhos, Gijón, Manchester, New York and Boston. The scientific treatment of data obtained from the sensors is the responsibility of the Polytechnic of Leiria, after signing a memorandum of understanding with the Municipality of Leiria, on March 21, 2023.

Why is this the best and new innovative practice? The real-time air, noise, and traffic monitoring system in Leiria is considered the best and new innovative practice because it combines advanced sensor technology with urban comfort features, offering a holistic approach to environmental monitoring.

[continued] Why is this the best and new innovative practice? This integration enhances public space utility while providing crucial data for scientific analysis and urban planning, thus improving citizens' quality of life and fostering academic collaboration.

Results/ Outcomes/ Impacts: This partnership will allow the carrying out of technical work with a strong practical component, master's theses and doctoral work, related to the characterization and analysis of environmental, noise and urban traffic data (pedestrian and motorised), as well as the construction of mitigation and improvement proposals for the observed conditions. It is also intended to promote joint dissemination actions on topics of interest to technicians, the academic and scientific community and citizens in general, which relate to the environment and the interpretation of environmental data, with the aim of improving the quality of life and the use of public space, such as the creation of documents, tools, projects and other partnership work to reinforce and bring academic/technical work closer to the needs of the Municipality of Leiria.

Municipality, Country: Leiria, Portugal.

Source #4

#5

Supermanzanas

Short description:

These are areas made up of nine blocks where cars are banned from the main streets, giving the inner streets back to pedestrians, with the aim of improving the physical and mental health of its inhabitants.

Best and new innovative practice:

Transforming nine-block areas by banning cars from main streets, repurposing inner streets for pedestrians, and creating human-centred leisure spaces to enhance accessibility and improve residents' well-being.

Why is this the best and new innovative practice? But rather than banning car traffic, the super islands are the target of an intervention that improves the accessibility of these areas and makes them more human, creating new leisure spaces where there used to be roads. Travelling around these super islands by vehicle is only possible for emergency purposes, for commercial purposes or for private individuals living in the area. The speed limit is 10 kilometres per hour.

Results/ Outcomes/ Impacts: There is a gain of 50% in the space available for pedestrians; 10% in the accessibility of these areas for people with motor difficulties; 28% in air quality; 3% in acoustic comfort; 47% in habitability/use of public space.

Municipality, Country: Barcelona, Spain.

Source #5

#6
TITLE OF PROJECT / CASE STUDY

Czech Smart City Cluster

Short description:

The Czech Smart City Cluster (CSCC) creates a unique partnership between companies, state administration, self-government, knowledge institutions and city residents. We are the innovators of the Smart City idea in the Czech Republic. The initiative strives to build smart cities in which social and technological infrastructure and solutions facilitate and accelerate sustainable economic growth. These trends improve the quality of life in cities for all their inhabitants, thus enabling the cities to become a pleasant environment for living and working.

Best and new innovative practice:

Energy, Lightening, Financing, waste management, Traffic, Parking, Health care, Smart buildings.

Why is this the best and new innovative practice? Integrating energy, lighting, financing, waste management, traffic, parking, healthcare, and smart buildings through a collaborative partnership between companies, government, knowledge institutions, and residents to foster sustainable urban development.

Results/ Outcomes/ Impacts: Several documents were published, such as General Methodology, Methodology of the Ministry for Regional Development and other methodologies specifically thematically focused on - energy, transport and safe city. Cluster (CSCC) iUs to develop a unique partnership between companies, state administration, self-government, knowledge institutions and city dwellers. It also promotes the idea of the Smart City within the Czech Republic.

Municipality, Country: Several Czech cities.

[Source #6](#)

#7

Green cities

Short description:

Cities integrating information and communication technology and individual devices connected to the network to optimise operations, services and connections to users and attain synergies among otherwise discrete parts of infrastructures as a system of systems.

Best and new innovative practice:

Green Cities, Resilient Cities, Inclusive Cities, Urban Development, Public Procurement, Financing.

Why is this the best and new innovative practice? Integrating ICT and network-connected devices to optimise urban operations and services, fostering synergies within infrastructure systems for enhanced sustainability, resilience, and inclusivity in urban development.

Results/ Outcomes/ Impacts: Within this activities, there were prepared and accepted several strategic documents: Návrh rozhodnutí, kterým se stanoví program politiky 2030 (Proposal of the decision on Programme of the politics 2030) „Cesta do digitální dekády" (The way into a digital decade), Klimatický plán hlavního města Prahy do roku 2030 (Climate plan of the Capital City of Prague), Cirkulární Praha 2030.

Municipality, Country: Several Czech cities.

Source #7

#8
TITLE OF PROJECT / CASE STUDY

WEBWiKo
Digital planning tools for population change

Short description:

WEBWiKo (Werkzeuge und Methoden zur Erstellung kleinräumiger Bevölkerungsprognosen und Wirkungsszenarien in der interkommunalen Kooperation) relates to the development of a digital planning tool for six municipalities in the Bremen region to record population change and to create forecasts for social infrastructure and services of general interest. The shared database enables inter-municipal cooperation.

Best and new innovative practice:

This planning tool can be considered as best and innovative because it faces demographic change on the one hand and migration on the other has been developed in an inter-municipal context to ensure the long term provision of services of general interest.

Why is this the best and new innovative practice? The development of a digital planning tool that records population changes and forecasts social infrastructure needs, fostering inter-municipal cooperation for sustainable service provision in the Bremen region.

Results/ Outcomes/ Impacts: The cities of the WEBWiKo Project have received the basis for their strategic planning: a database to forecast population development, small-scale and regularly updatable which allows to forecast the needs for social infrastructure and for the necessary provision of services of general interest.

Municipality, Country: The cities of Bremen, Delmenhorst and Osterholz-Scharmbeck, the municipality of Ganderkesee and the districts of Osterholz and Oldenburg, Germany.

Source #8

#9

TITLE OF PROJECT / CASE STUDY

MIGOEK
Migrant Economy for Rural Areas

Short description:

Promotion of migrant economy for the sustainable development of rural areas.

Best and new innovative practice:

The outcomes of the project- modules to provide tailor-made support for enabling residents with migration background - can be regarded as best and new innovative practices as they help municipalities in rural areas to ensure their sustainable economic development on the one hand and to enhance diversity and achieve full integration of residents with migration background, on the other.

Why is this the best and new innovative practice? The MIGOEK project is considered the best and new innovative practice because it provides targeted support for migrant entrepreneurs, promoting economic growth and integration in rural areas. By leveraging the potential of migrant-run businesses, it revitalises local economies, creates jobs, and enhances social cohesion, ensuring long-term sustainability.

Results/ Outcomes/ Impacts: Development of modules to provide needs-based support for (1) those residents with migration background who are interested in setting up a business, (2) for businesses run by residents with a migration background and (3) for advisory organisations based on an analysis of the potential of companies operated by migrants for the sustainable development of rural areas and based on the idea to use the value of migration to create jobs and regional added value, to revitalise city centres and to contribute to integration.

Municipality, Country: The municipalities of Cloppenburg, Holzminden and Werra-Meißner-Kreis in Lower-Saxony, Germany.

Source #9

#10

TITLE OF PROJECT / CASE STUDY

National Network of Healthy Cities

Short description:

The National Network of Healthy Cities of the Czech Republic (NSZM) is a professionally focused association of 140 cities, municipalities and regions. It has been actively working in the Czech Republic for 30 years. It is a platform for cooperation of professionals from town halls - politicians and coordinators. In accredited education, it provides members with the methodology and know-how to progress successfully.

Best and new innovative practice:

It brings hundreds of examples of good practice , mutual inspiration and sharing of successful solutions among members. The initiative organizes national conferences and seminars.

Why is this the best and new innovative practice? Facilitating the exchange of good practices and successful solutions among 140 member cities and regions through national conferences, seminars, and an advanced online database system for modern data and tools.

Results/ Outcomes/ Impacts: The NSZM regularly convenes national meetings of members and accredited educational events. It continuously provides individual counselling to members. Cooperates expertly with a number of universities and national institutions. The created DATAPLÁN NSZM (Database) system brings modern online data and tools. The NSZM office provides many other practical services for members.

Municipality, Country: Several Czech cities.

Source #10

#11
TITLE OF PROJECT / CASE STUDY

Fahrradmodellquartier Alte Neustadt

Short description:

Germany's first model bicycle district has been created in Bremen's "Alte Neustadt" district. Here, mobility and transport are being rethought in order to positively shape quality of life and mobility for everyone. Under the motto 'Mobilising together - upgrading the district and campus', and in addition to the new approach of thinking differently about traffic, the "Alte Neustadt" model bicycle district also aims to contribute to climate protection, as well as to reduce conflict in public spaces, improve road safety and make it easier to get around by bike and on foot - but buses, trains and cars are also being considered. Numerous local initiatives and institutions supported the projects.

Best and new innovative practice:

Creating Germany's first model bicycle district in Bremen's "Alte Neustadt" to rethink mobility, enhance quality of life, promote climate protection, and improve road safety with a comprehensive cycling infrastructure.

Why is this the best and new innovative practice?
The "Alte Neustadt" model bicycle district is considered the best and new innovative practice because it integrates a holistic approach to urban mobility, prioritising cycling and walking while accommodating public transport and cars. It fosters sustainable transport, reduces public space conflicts, enhances road safety, and supports climate protection efforts through community collaboration.

Results/ Outcomes/ Impacts:
The transformation of the Alte Neustadt into a bicycle zone has brought many improvements. The cycle zone offers a coherent network of cycle lanes, parking facilities, uniform signage and other facilities to make cycling the preferred mode of transport. What still applies: the road traffic regulations. Cyclists are allowed to cycle side by side, right before left still applies, as does the maximum speed of 30 km/h, including for cyclists.

Municipality, Country:
Bremen, Germany.

Source #11

#12
TITLE OF PROJECT / CASE STUDY

COMo
CO2 monitoring in publicly accessible indoor spaces

Short description:

In COMo, the CO2 concentration (CO2 = Carbon Dioxide) serves as a measure for indoor air quality and aerosol pollution; the latter correlates with the potential (COVID) viral load. Objective CO2 readings via networked sensors enable operators to control the indoor air quality and thus reduce the risk of infection for visitors. Published data allow visitors to make decisions about visiting the facility. All content is available under open source licences (MIT, BSD, Creative Commons).

Best and new innovative practice:

The project provides information about: How the sensors can be optimally used for monitoring the interior. Whether the provision of the data leads to a change in the behaviour of operators and visitors. Whether the LoRaWAN technology used enables data transmission that is sufficiently secure and sufficient for data evaluation and the forecasting of ventilation measures. The project has provided insights that enable further expansion of the monitoring of CO2 readings to improve indoor air hygiene.

Why is this the best and new innovative practice? The COMo project is the best and new innovative practice because it provides a practical solution for improving indoor air quality and reducing infection risks by using CO2 concentration as a proxy for air hygiene. It effectively utilizes LoRaWAN technology for secure data transmission and empowers both operators and visitors with actionable insights to foster safer indoor environments.

Results/ Outcomes/ Impacts: Objective CO2 readings enable operators to maintain optimal indoor air quality. Visitors can make informed decisions based on published air quality data. Insights gained from the project support the further expansion of CO2 monitoring for enhanced indoor hygiene. Demonstrated the efficacy of LoRaWAN technology for secure and efficient data transmission and evaluation.

Municipality, Country: Berlin, Germany.

Source #12

#13
TITLE OF PROJECT / CASE STUDY

KI-basierte Flächenbelagserkennung AI-based surface detection

Short description:

Green spaces and green paths are constantly changing due to the climate and human behaviour. It is important and necessary for municipalities to regularly update the boundaries of green spaces and water-bound paths. As there are numerous green spaces with different characteristics and features, it takes a lot of time and money to constantly update all of a city's green spaces. In an initial pilot project, a prototype AI is to be developed that can recognise and classify the surface coverings (lawns, sealed surfaces, etc.) across the entire area in the shortest possible time using aerial photographs.

Best and new innovative practice:

Data on the different surface coverings in a city helps to analyse where water seeps away or accumulates in our city. Until now, there has been a lack of data for these data-based analyses. The "AI development of green spaces" makes work easier by automatically creating various catalogues of green spaces within a very short time using intelligent image recognition. This allows the green space cadastre to be updated quickly and easily.

Why is this the best and new innovative practice? The AI-based surface detection project is considered the best and new innovative practice because it significantly reduces the time and cost associated with updating green space cadastres. It provides municipalities with crucial data for analysing water seepage and accumulation, supporting data-driven urban planning and enhancing environmental management. The intelligent image recognition system automates the creation of green space catalogues, ensuring up-to-date information for better decision-making.

Results/ Outcomes/ Impacts: Rapid and accurate classification of surface coverings using AI and aerial photographs. Efficient updating of green space cadastres, saving time and resources. Enhanced analysis of water seepage and accumulation for improved urban planning. Automated creation of various green space catalogues, aiding environmental management. On a total scope of 9 projects, 3 have already been successfully completed.

Municipality, Country: Mönchengladbach, Germany.

Source #13

#14

TITLE OF PROJECT / CASE STUDY

PPP for driving Sustainability, Circularity and Innovation in Lisbon Municipality

Short description:

Lisbon Municipality aims for more innovation and sustainability in Public Procurement. Urgency and specifications' complexity are excuses for not considering sustainability in tenders and barriers to attracting innovative SMEs and startups. The innovative approach involved users designing and developing the Procurement Planning Platform (PPP), using a rapid development tool, cloud-based, and agile methods, which selects and supports a project-led approach for deploying new procurement strategies.

Best and new innovative practice:

Implementing a cloud-based Procurement Planning Platform (PPP) that leverages rapid development tools and agile methods to drive sustainability, circularity, and innovation in public procurement for Lisbon Municipality.

Why is this the best and new innovative practice? The PPP transforms the procurement process by integrating sustainability and innovation. By anticipating tender planning and utilising e-Catalogues and e-Forms, it ensures better resource management, compliance, and specification of needs. This approach facilitates the inclusion of SMEs and startups, driving forward a more sustainable and innovative procurement model.

Results/ Outcomes/ Impacts: On process: tenders are now planned 3 months in advance, covering all tenders, improving resource planning (legal and technical support). Compliance: previously unsupervised tenders (under EUR 75K) are now tracked, enhancing tactical sourcing decisions. Specification of Needs: e-Catalogues and e-Forms offer a broad range of conditions, improving the understanding of needs and targeting sustainability criteria. Systems: these systems form the backbone of a new centralised procurement model currently being drafted. Adoption: over 500 users have widely adopted this new system.

Municipality, Country: Lisbon, Portugal.

Source #14

#15

SBIR
Sustainability Bond with Impact-linked Return

Short description:

Sustainability bond with impact-linked return (SBIR) is an innovative funding model to unlock social impact investing which advances the potential to drive public sector change and to attract a broader range of investors, while also financing social infrastructure. The overall goal is to expand the investor base for impact investing and build public sector capacity to tackle various social challenges.

Best and new innovative practice:

Two perspectives on the innovation are provided here, from the public and financial sectors. From a public-sector perspective, the innovation will establish a change management vehicle within established institutions with the capability of collaborating with both local and national actors and expertise. The model is also acknowledging the connection between public and private sector, and the need to find cooperative models that incentivise both parties to reach better outcomes and save public expenditures.

Why is this the best and new innovative practice? The SBIR is considered the best and new innovative practice because it establishes a collaborative funding model between the public and private sectors, incentivizing both to achieve better outcomes and reduce public expenditures. By integrating impact-linked returns, it expands the investor base for social impact investing and enhances public sector capacity to address social challenges effectively.

Results/ Outcomes/ Impacts: Insights into short-term sick leave drivers in three Swedish local authorities. Identified obstacles for institutional investors in SIB investments. Follow-up study on long-term sick leave in seven health care regions. Preliminary decisions for SALAR, RISE, and 2 institutional investors to join new initiatives. Seven local authorities committed to the new SIB. Drafts for financial instruments and service procurement. Expected Results: Launch of a large-scale SIB platform (>€100m), proactive sick leave management in Sweden's public sector, reduced sick leave costs, positive financial outcomes, and a scalable model for new interventions.

Municipality, Country: Sweden.

Source #15

#16
TITLE OF PROJECT / CASE STUDY

Aeolus
Mid-altitude maritime monitoring platform

Short description:

Aeolus (mid-altitude maritime monitoring platform for security, search & rescue and environmental monitoring) is a mid-altitude airborne maritime sensor platform which significantly increases the operating surveillance range by increasing the elevation of the monitoring systems. The Aeolus platform can effectively operate at 450m above the ship – increasing the surveillance area in excess of 11 times of what can be monitored with existing solutions. The platform can be used with multiple lifting systems and can be deployed for many hours. It is being trialled by Naval and Search & Rescue Services.

Best and new innovative practice:

The innovative principle behind the Aeolus platform looks at extending the available line of sight. Current monitoring systems fitted to ships can monitor out to 14 Nm. As at that point the curvature of the earth begins to hide objects over the horizon. By increasing the elevation of the monitoring systems the line of sight can be extended resulting in a greater area under surveillance.

Why is this the best and new innovative practice? The Aeolus platform dramatically extends the line of sight for maritime monitoring systems, enhancing the effectiveness of security, search and rescue, and environmental monitoring. By operating at higher altitudes, the platform can cover a much larger area, providing a cost-effective and flexible solution that improves situational awareness and response capabilities.

Results/ Outcomes/ Impacts: Aeolus aims to be a cost-effective, low-power maritime monitoring platform that can operate above vessels at altitudes of 50m to 450m, expanding their surveillance area by up to 10 times for large ships and 20 times for smaller ones. The project has developed a 22kg modular platform, tested at sea with the Irish Naval Service, reaching 150m in 30kt (55kph) winds. At this altitude, the platform extended the vessel's visual horizon from 9nm to 24nm (16km to 44km) and the radio/radar horizon from 10nm to 27nm (18km to 51km), increasing the visual monitoring area from 234nm² to 1751nm² (801km² to 6006km²) and the radio monitoring area from 311nm² (1067km²) to 2332nm² (7999km²).

Municipality, Country: Ireland.

#17

City Points Cascais

Short description:

The City Points Cascais app, inspired by gamification, allows citizens to earn points by completing specific actions. These points can then be exchanged for vouchers for goods or services provided by various organizations or municipal services. Available on both Android and iOS, the app rewards actions in areas such as environmental protection, citizenship, social responsibility, and sustainable mobility. Users can earn points through activities like registering with the app, ranking in the top 5 monthly users, recommending the app to friends, and completing actions such as recycling beverage containers at designated machines, donating blood, adopting a pet, using public transport, volunteering, and exchanging school books. Points can be redeemed for organic products from Quinta do Pisão, concert and show tickets, entry to cultural facilities, nature activities, and more.

Best and new innovative practice:

City Points Cascais is an innovative platform that encourages democratic participation by the public, recognising citizens who actively contribute to the sustainability of Cascais municipality. Aims to promote citizenship best practices as well as to recognize "super citizens", people whose actions are an active contribute to local sustainability.

Why is this the best and new innovative practice? Aims: to foster active citizenship among residents and people who visit or work in the municipality; to raise the public's awareness of the importance of participating in the sustainable development of the municipality, particularly in the areas of the environment and social solidarity and through healthy living habits and volunteering; to involve citizens in the municipality's development strategy via the actions and initiatives shown in the app; to facilitate access to information on forms of civil participation.

Results/ Outcomes/ Impacts: Increased civic engagement and participation in sustainable activities. Enhanced awareness and adoption of environmentally friendly and socially responsible behaviours. Positive reinforcement through rewards, such as vouchers for organic products, cultural events, and nature activities. Promotion of healthy living habits and volunteering. Strengthened community involvement in the municipality's development strategy. In 7 years of use, international recognition, over 12000 users and 28 partners.

Municipality, Country: Cascais, Portugal.

Source #17

#18
TITLE OF PROJECT / CASE STUDY

Tackling urban heat through data, paying attention to our citizens' perception

Short description:

Tackling the effects of rising urban heat goes beyond objective physical measurements. For sure, technical services are in need of blended indicators about the effects of local policies: under which conditions tree planting, fountains, urban design contribute to reduce island heats. The project has created such tools but is also willing to take seriously into account the subjectivity, the perceived heat, the sensations of our citizens, for they contribute hugely to collective resilience.

Best and new innovative practice:

Integrating objective measurements with subjective citizen perceptions to create a multifactorial model for assessing and predicting urban heat mitigation strategies, enhancing collective resilience through informed urban design.

Why is this the best and new innovative practice?
The implemented model is multifactorial, allowing for both current comfort mapping and predictions of the effects of future policies on urban cooling. Objective data was collected using sensors installed in eight urban areas with diverse topographies (public squares, alleys, dense areas, wooded areas). To assess residents' perceptions of heat, on-site surveys and interviews were conducted, with social media analysis planned for broader insights.

[continued] Why is this the best and new innovative practice? The project categorized urban spaces to measure temperature differences, comparing a tree-less area to various archetypes (with trees, streets, parks, urban forests). The next phase involves using this data for simulations and predictions before implementing tree-planting projects.

Results/ Outcomes/ Impacts: Initial results show significant temperature differences between the most exposed areas and those cooled by vegetation, with up to an 8°C variation. The qualitative analysis of residents' perceptions is equally important, offering insights into how people might react to increasingly hot summers and helping shape resilience strategies. This study leads to practical, short-term recommendations, including: large-canopy trees in parks provide more perceived coolness than areas with small trees or short vegetation, cooling effects are limited to the immediate area, and residents highly value calm and tranquillity, often associating it with a sense of coolness.

Municipality, Country: Bordeaux, France.

Source #18

#19

TITLE OF PROJECT / CASE STUDY

Democratic Climate Model

Short description:

Developed a prototype for a Democratic Climate Model (DCM) to show the impact of putting citizens at the centre of local climate action. It responds to the gap in pan-European efforts to democratise climate action, providing terminology and models to shift cities from a solely technocratic to a democratic approach to climate resilience. It is evolving 'climate democracy' discourse with funders, public sector and civil society by scaling local initiatives to European potentials by using the Model to grow 'climate democracy' discourse in Europe.

Best and new innovative practice:

The DCM is an innovative framework that integrates citizen-centred approaches into local climate action, fostering inclusive, community-led climate resilience through accessible terminology and shared understanding.

Why is this the best and new innovative practice? The DCM prototype is both a descriptive and analytic tool designed to enhance climate resilience in cities. It simplifies complex concepts to help various city stakeholders understand climate action conditions and become more effective change agents. Developed through collaborations with public sectors, funders, civil society, and communities as part of the EIT Climate-KIC Healthy, Clean Cities Deep Demonstrations

[continued] Why is this the best and new innovative practice? project, it aims to help cities explore and implement strategies toward carbon neutrality. Serving as a compass, the Model initiates conversations about inclusive, community-led methods that enhance participation, governance, and climate resilience, while also promoting innovation in participatory democracy for climate resilience among public, civil, and community groups.

Results/ Outcomes/ Impacts: The DCM consists of 3 parts. City Canopy: measures and visually represents a city's climate resilience across 4 categories, diversity of actors, participatory culture, subject matter expertise, and resources. Actor Framework: analyses the types of actors involved in local climate action, their roles, and necessary evolutions to achieve just and sustainable climate futures. Rooted vs Weak Collaboration: offers a broad perspective on how collaboration and enhanced citizen participation contribute to climate resilience. The prototype is being implemented, tested, and iterated in collaboration with public sector leaders, civil society, and communities across 11 EU cities.

Municipality, Country: Belgium.

#20

TITLE OF PROJECT / CASE STUDY

CAROs
4 Climate Action Regional Offices

Short description:

Climate change requires comprehensive responses at local and regional level which makes local government critical to the delivery of national and international policies. The establishment of four Climate Action Regional Offices (CAROs) as Centres of Excellence based on distinct geographic/topographic characteristics enables them to advise local authorities in their region on climate action strategies ensuring a coordinated response and assisting with the roll-out of national/ regional policies at local level.

Best and new innovative practice:

Establishing four Climate Action Regional Offices (CAROs) based on distinct geographic and topographic characteristics to coordinate local climate action strategies, ensuring regional consistency and fostering resilience to climate risks.

Why is this the best and new innovative practice? Challenges for local government are significant, especially with climate impacts that transcend boundaries. Learning from severe weather events has underscored the importance of collaboration between adjacent local authorities. In Ireland, four CAROs (Climate Action Regional Offices) cater to specific regional climatic risks and guide local authorities in developing and implementing Regional Adaptation Strategies.

[continued] Why is this the best and new innovative practice? This approach promotes consistency and addresses cross-boundary issues, fostering a collaborative model focused on good governance, strategic planning, and societal learning. CAROs are key in enhancing regional resilience to future climate risks.

Results/ Outcomes/ Impacts: Four CAROs have been established in Ireland, each operating in regions with unique geographic and climatic conditions. These offices are focused on understanding regional vulnerabilities and enhancing resilience to future climate risks. They facilitate regional teams to lead adaptation planning and develop comprehensive regional strategies. CAROs also share data and expertise, fostering synergies between local authorities and state agencies for more informed, cost-effective decision-making. This regional office structure promotes cohesive planning across local authorities, considering interdependencies and broader issues, ultimately strengthening Ireland's resilience to extreme weather and climate change.

Municipality, Country: Ireland.

Source #20

IN CONCLUSION

Trends Analysis and Guidelines

The review of innovative practices in environmental sustainability reveals a diverse array of strategies being implemented across different regions. These practices highlight significant trends in public policies aimed at enhancing sustainability, addressing climate change, and promoting socio-economic development. This analysis summarises key trends and provides guidelines for municipalities seeking to adopt and adapt these innovative practices.

Trends in innovative practices reveal a focus on the **integration of technology** and **data analytics with digital planning tools** such as the project WEBWiKo, in Germany which facilitates long-term strategic planning and enhances inter-municipal cooperation. A Real-Time Monitoring System is also adopted in Leiria, Portugal, providing a critical data for urban management and environmental monitoring.

A **community-centric approach** can be highlighted by the Democratic Climate Models where citizens are at the centre of climate action, fostering inclusive and participatory approaches to urban resilience.

Sustainable economic development can be promoted with environmental sustainable initiatives integrating and encouraging economic participation of migrants in rural areas and by the integration of innovative SMEs and startups, ensuring compliance with sustainability criteria in tenders.

Climate resilience and adaptation has been worked on by local governments through green space management using intelligent image recognition to manage and update green spaces, aiding in climate adaptation strategies or by urban heat mitigation, such as increasing green cover and assessing temperature differences, to enhance urban resilience to climate change. The **collaborative networks and knowledge sharing** is very important in some innovative public policies. It's the case of the National Network of Healthy Cities in the Czech Republic which provide a platform for municipalities to share best practices, receive accredited training, and collaborate on sustainable urban development initiatives, and the **smart city clusters** which promote partnerships between various stakeholders to develop smart city solutions, enhancing urban sustainability through technological and social innovations.

The **implementation of innovative practices** has made it possible to take advantage of technology and data. The **investment in digital tools and real-time monitoring systems** to gather and analyse data for informed decision-making; the **use of AI and machine learning** to automate and enhance urban management processes, such as green space maintenance and traffic monitoring are two excellent examples. But it is also relevant to **foster community engagement**, developing participatory models that involve citizens in climate action and urban planning; and **promote inclusive economic policies** to support economic initiatives that integrate marginalised groups, such as migrants, to foster sustainable development.

Climate change is probably humanity's greatest challenge and the solution does not lie solely in global initiatives but also in local communities, i.e., enhancing their climate resilience. This can be achieved by implementing green infrastructure projects to mitigate urban heat and enhance resilience to climate change or developing and maintaining urban green spaces using advanced technologies to support biodiversity and climate adaptation.

The analysis of best and new practices in environmental sustainability reveals a multifaceted approach involving technology, community engagement, economic inclusion, climate resilience, and collaborative networks. Municipalities can draw valuable insights from these trends and guidelines to develop and implement effective sustainability policies tailored to their unique contexts. By embracing these innovative practices, cities can enhance their sustainability, resilience, and overall quality of life for their residents.

"We must address the underpinnings of the environmental crisis — our social values, our political economy, and the human behaviors that flow from them."

— GUS SPETH (2008) «THE BRIDGE AT THE EDGE OF THE WORLD»

3

DIVERSITY AND INCLUSION

Best and New Practices on Diversity and Inclusion

CONTEXTUALIZATION

Today, in our globalized and increasingly competitive world, innovation has become crucial for companies and organizations, particularly in the public sector and local government. These areas view innovation as a key path for economic and social development, solving problems, overcoming challenges, and enhancing responsiveness.

For Portuguese municipalities, innovation is also vital in meeting the expectations of a participatory, demanding, and informed citizenry. While innovation can mean many things and encompass various dimensions, it is increasingly dependent on embracing diversity and inclusion.

António Guterres, the Secretary General of the United Nations, emphasizes the strength of diversity: "The fact that societies are becoming increasingly multi-ethnic, multicultural, and multireligious is

a good thing. Diversity is a strength, not a weakness." This perspective highlights the significance of a diversity and inclusion strategy in organizations.

Diversity refers to the vast range of characteristics that make each individual unique, embracing different values and cultures, and turning individual differences into collective strengths. Inclusion, meanwhile, focuses on creating an environment where everyone feels valued and can fully contribute, regardless of their differences. It's about respecting and valuing individual traits, considering diverse viewpoints and experiences, which fosters a sense of belonging and respect for all.

Together, diversity and inclusion drive innovation by providing a broad spectrum of ideas and perspectives, helping organizations find new solutions to old problems.

Organizations that adopt these values tend to have more creative and productive teams, adaptable to changes.

In our complex, uncertain, and ambiguous world, societies are increasingly diverse across culture, ethnicity, religion, gender, sexual orientation, age, and skills. Implementing a diversity and inclusion strategy is crucial, enhancing the potential for growth, learning, and innovation. Addressing these elements in all societal sectors—schools, businesses, and beyond—is essential for fostering spaces where new ideas and perceptions can flourish, leading to creative and innovative solutions.

The success of any organization, whether public or private, formal or informal, hinges on the diversity of thought and the exchange of ideas. Therefore, innovation is fundamental, and diversity and inclusion are key to enhancing creativity.

#1
TITLE OF PROJECT / CASE STUDY

Cascais EDU

Short description:

Cascais EDU (Promoting Educational Success and Equal Opportunities) promotes educational success and equity by supporting various specialised activities for students. This program aims to fully integrate children and young people into their classrooms and schools by using innovative teaching methods that cater to different learning styles, including various ways to access the curriculum. Help to reach full potential by supporting access to training, higher education, and opportunities after school. Empower to participate actively in leisure activities, social events, and independent living.

Best and new innovative practice:

Fostering inclusive learning environments through diverse teaching methods, facilitating access to education, training, and social integration.

Why is this the best and new innovative practice? It showcases innovative practices that promote student success and equality of opportunities, standing out for their comprehensive approach, collaborative nature, and focus on early intervention and individualised support, considering a multidisciplinary and collaborative approach; early identification and intervention; individualised support and personalised learning; transition planning and post-school success; community engagement and partnerships; continuous evaluation and improvement. These initiatives serve as a model for promoting inclusion, student success and equality of opportunities in education.

Results/ Outcomes/ Impacts: The project engages, for educational inclusivity, 8 primary (1st cycle), 6 middle (2nd and 3rd cycle), and 2 high schools (secondary), along with 1 inclusion resource centre for Inclusion [CRI] of the Cooperativa para a Educação and the Cooperativa para a Educação e Reabilitação de Cidadãos Inadaptados de Cascais.

Municipality, Country: Cascais, Portugal.

Source #1

#2

TITLE OF PROJECT / CASE STUDY

LGBTI+
I Municipal Plan.2020-2021

Short description:

Lisbon's pioneering plan aims to advance LGBTI+ rights, aligning with national strategies, such as the National Strategy for Equality and Non-Discrimination 2018-2030 (ENIND) "Portugal + Equal", and fostering inclusivity by giving visibility and new responses to these communities.

Best and new innovative practice:

Empowering LGBTI+ communities through tailored responses across various sectors like health, education, and employment. LGBTI+ community is diverse, with specific characteristics and challenges.

Why is this the best and new innovative practice? It fosters inclusivity by addressing diverse needs and challenges through collaborative methodologies with stakeholders to build a coherent municipal orientation, aimed at articulating public policies to promote equality, not discrimination. A working methodology was discussed and agreed upon with associations and collectives in the LGBTI+ and Equality areas to collect contributions and promote participation and reflection in various areas such as health, violence, the school context, sport, employability, culture, interculturality and public space.

Results/ Outcomes/ Impacts: The plan consolidates policies, namely measures included in the Major Options Plan, while preparing for joining the Rainbow Cities Network, and offers concrete solutions to challenges faced by individuals of diverse sexual orientations and gender identities.

Municipality, Country: Lisbon, Portugal.

Source #2

#3

Inclusive Sports Training Congress

Short description:

As part of Project "(In)Formar e (Des)Envolver para incluir", the Portuguese Federation of Sports for People with Disabilities (FPDD) and Palmela Desporto - Municipal Company and APPACDM - Association of Parents and Friends of the Citizen Mentally Disabled of Setúbal, collaborate for the 1st Adapted Sports Congress, offering innovative training sessions online and in-person, including the Training Action "Initiation to Physical and Sports Activity in Children and Young People with SEN". The Actions are aimed at Local Authorities, Clubs, Institutions, Technicians in Sport and Rehabilitation, Physical Education and Special Education Teachers, Physical Education students and the general public.

Best and new innovative practice:

Integrating training, experience sharing, and practical sessions to enhance inclusion in sports for children and youth with special needs.

Why is this the best and new innovative practice? It combines theoretical learning, practical application, and stakeholder engagement to promote inclusive sports practices effectively. Consists of three moments: 1) training, 2) sharing experiences and knowledge of various stakeholders, and 3) practical components.

Results/ Outcomes/ Impacts: Increased awareness of the importance of sports for people with disabilities, to maintain and improve their physical condition and health, promoting socialisation and quality of life in the community as well as demystification of misconceptions, and strengthened networking among stakeholders.

Municipality, Country: Palmela, Portugal.

Source #3

#4

Rhizome Cities – Citizens Tows

Short description:

Rhizome Cities fosters connections between civil society, municipalities, and migrant communities across Europe in a post-colonial context, led by Palermo. The idea is to use knowledge of the colonial past to "empower and capacitate" African communities living in Europe. Participating cities engage in critical discussions and projects on urban development, budget distribution, and cooperation with civil society, aiming at building links in view of the potential longer-term development into a structured network.

Best and new innovative practice:

Leveraging colonial history to empower European African communities for inclusive development and cultural exchange, targeting migrants, refugees, and youth. The project targets not only migrants but also refugees and young people studying in these European cities.

Why is this the best and new innovative practice? Strengthens links between migrant communities and their countries of origin, fostering cultural and economic ties between European cities and the African continent, while promoting inclusive integration strategies. Braga, for example, is a city that is receiving an increasing number of immigrants from Africa and other continents.

Results/ Outcomes/ Impacts: Anticipated outcomes include enhanced cultural exchange, economic development, and reduced feelings of colonisation in receiving cities like Braga, Portugal.

Municipality, Country: Braga, Portugal; Athens Greece; Bergamo and Reggio Calabria, Italy; Dusseldorf and Mannheim, Germany; Marseille and Montpellier, France; and Tirana, Albania.

Source #4

#5

PLICC
Local Inclusion Plan for the Roma Community

Short description:

PLICC (Plano Local de Inclusão da Comunidade Cigana) outlines initiatives to enhance living conditions and reduce inequalities for Roma community members. It emphasises tailored activities, resource balance, and public-private participation. The plan aims to frame the work developed and the initiatives that directly contribute to improving the living conditions of the Roma community members residing in the Municipality. resulting from a diagnostic work, promoting the reduction of inequalities so that differences are also valued and considered in defining, implementing, and monitoring policies.

Best and new innovative practice:

PLICC employs cross-cutting measures emphasising networking, interdisciplinarity, and territorial focus, enhancing municipal priorities for Roma inclusion with concrete, monitored action plans. A yearly action plan is developed aiming primarily to present the municipal priorities regarding the inclusion of the Roma community, materialised in concrete activities, with defined objectives, targeted audiences, and involving public and private entities that can best contribute to maximising the results to be achieved.

Why is this the best and new innovative practice? PLICC pioneers municipal-level planning for Roma integration, engaging the community in action plan development. It optimises resources, coordinates strategies, and promotes impactful inclusion strategies, respecting the specificities of the territory.

Results/ Outcomes/ Impacts: PLICC initiatives include intercultural mediation, educational support, job mentoring, ICT training, health screenings, cultural events, literacy courses, and community engagement activities. Some activities implemented under the PLICC include the organisation of the II Roma Policy Academy and the implementation of the "Network for Role Models" project (supported by the Erasmus+ European Agency) and the dynamization of a Parents and Children Club, among others.

Municipality, Country: Torres Vedras, Portugal.

Source #5

#6

INCLUCITIES
Building Inclusive cities with migrants

Short description:

The IncluCities (2020-2022) project aims at improving the integration of third-country nationals in middle-sized cities through city-to-city cooperation. It involves eight cities and their national associations, improving integration practices through mentoring schemes covering various areas. Associations of local and regional governments play a pivotal role in this process by disseminating good practices from cities to the rest of their network. Furthermore, they represent local and regional governments vis-à-vis central governments.

Best and new innovative practice:

Creating inclusive cities for migrants and refugees presents a challenge for local communities, especially in inexperienced small and medium-sized cities with limited human resources and access to funding. IncluCities addresses the integration of Third-country Nationals challenges by facilitating knowledge exchange, enhancing capacities, and strengthening the role of national associations, influencing EU integration policies.

Why is this the best and new innovative practice? The strength of IncluCities lies in combining concrete solutions and lessons learned from the cities for potential global implications. It scales successful integration practices, influences EU policies, and supports city-to-city cooperation through mentoring processes, fostering concrete changes in local integration practices. By defining good practices and benchmarks (such as migrant children's access to school) and identifying key factors necessary to achieve them (such as enough financial resources), IncluCities helps cities develop action plans.

Results/ Outcomes/ Impacts: Facilitating knowledge exchange between mentor and mentee cities, enhancing integration policy delivery capacities, and reinforcing coordination between government levels. Cities are paired as mentors and mentees in groups of 2, with Migration Work as the facilitator. It supports cities in carrying out concrete changes in local integration practices.

Municipality, Country: Brussels, Mechelen, Fuenlabrad and Schaerbeek, Belgium.

Source #6

#7

TITLE OF PROJECT / CASE STUDY

Agency for Social Inclusion

Short description:

The Agency for Social Inclusion (ASI), established by the Czech Ministry of Regional Development, supports local governments in promoting social inclusion. The Agency assists municipalities in service provision, employment promotion, and infrastructure development. It facilitates the effective use of financial resources and advocates for social policies at the national level.

Best and new innovative practice:

ASI fosters collaboration among local actors, ensuring equal access to education, healthcare, employment, and social services. It promotes an interdepartmental approach and links public administration with the non-profit sector.

Why is this the best and new innovative practice? By tailoring solutions to individual needs, ASI aids in the social integration of people at risk of social exclusion and the development of marginalised areas, benefiting all involved parties. ASI assists municipalities and local authorities in various areas, including education, employment, social services, and housing. It effectively utilises financial resources and collaborates with central government bodies. Additionally, it formulates legislative proposals and implements projects aimed at social inclusion and mutual coexistence.

Results/ Outcomes/ Impacts: ASI formulates proposals in the area of legislation, subsidy titles, social policies, etc. Currently in implementation: Individual Project of the Operational Programme Employment (Systematic Assurance of Social Inclusion), Individual project of the Operational Programme Research, Development and Education (Inclusive and quality education in areas with socially excluded localities), Project Place for all (Building a Space for Mutual Coexistence).

Municipality, Country: Local Governments, Czechia.

Source #7

#8

TITLE OF PROJECT / CASE STUDY

Positive storytelling on migration toolkit for local authorities

Short description:

The "Positive Storytelling Kit" gathers successful communication campaigns promoting a positive narrative on migration, providing inspiration for local authorities to develop their campaigns. Given the prevalence of hate speech targeting migrants in public discourse, it becomes crucial to equip key stakeholders in the migration dialogue with effective tools. These resources enable them to engage with pertinent citizens, institutions, and stakeholders, particularly in border regions where the influx of new migrants significantly influences local demographics.

Best and new innovative practice:

Equipping frontline actors in the migration debate with effective tools to counter hate speech, particularly impactful in border areas. Offers a different narrative emphasising empathy and curiosity.

Why is this the best and new innovative practice? The toolkit enhances understanding and implementation of successful communication strategies, aiding local authorities in crafting impactful migration narratives. The toolkit is organised into four sections, allowing for an in-depth analysis of effective communication campaigns on migration. It covers common elements across all campaigns and provides insights tailored to different media platforms and public events, aiding in the development of impactful strategies.

Results/ Outcomes/ Impacts: The toolkit provides information on particular projects. The toolkit is interactive. It offers interactive resources, multimedia examples, and project insights to shift the migration discourse towards empathy and away from fear.

Municipality, Country: Lampedusa and Linosa, Italy.

Source #8

#9

Fundão Acolhe

Short description:

Fundão has created a team of people and a set of services that facilitate the arrival of migrants to the new territory, accompanying them from the uncertain moment of arrival to the conscious development of their new life.

Best and new innovative practice:

Fundão's innovative practice integrates a comprehensive team and services to support migrants from arrival to integration. This includes the Centro para as Migrações, CLAIM, GAE, and On Wheels services, promoting inclusion, autonomy, and diverse community initiatives. Fundão was one of the nine European Capitals of Inclusion and Diversity 2023 awarded by the European Commission, having been chosen for its efforts to strengthen diversity and inclusion in its community.

Why is this the best and new innovative practice? It offers comprehensive, coordinated support for migrants, from arrival to full integration. The combination of the Centro para as Migrações, CLAIM, GAE, and On Wheels services provides tailored assistance in areas like legal status, housing, education, and employment, ensuring inclusive and effective integration.

Results/ Outcomes/ Impacts: The results include enhanced migrant support and integration. Since its inception, CLAIM has facilitated access to vital information on immigration laws, health, education, and employment. This collaboration between the Fundão Municipality and the Alto Comissariado para as Migrações has significantly streamlined the integration process, ensuring that migrants receive timely and relevant assistance, thereby improving their overall quality of life and fostering a more inclusive community.

Municipality, Country: Fundão, Portugal.

Source #9

IN CONCLUSION

Trends Analysis and Guidelines

Diversity and inclusion are crucial for sustainable development and creating fairer, more equitable environments. Local governments view innovation as essential for economic and social progress, solving problems, and improving response capabilities. Municipalities consider diversity and inclusion critical to innovation, meeting the expectations of a participatory and informed citizenry. Diversity covers a broad range of unique characteristics, including race, ethnicity, gender, sexual orientation, age, abilities, culture, and personal experiences. Inclusion ensures these differences are valued, giving everyone equal opportunities to participate and contribute to society.

A notable initiative is the Cascais EDU project, which enhances educational success through diverse teaching methods and integrates students into classrooms, **promoting access to training and higher education**. This initiative sets a benchmark for inclusive educational practices.

Similarly, Lisbon's I LGBTI+ Municipal Plan 2020–2021 advances LGBTI+ rights by tailoring responses in health, education, and employment, demonstrating the importance of inclusivity in municipal policies. This plan consolidates policies and **provides concrete solutions for individuals of diverse sexual orientations and gender identities**.

Promoting inclusive sports practices, such as the Inclusive Sports Training Congress, enhances inclusion for children and youth with special needs, improving their quality of life and raising awareness about disabilities.

The Rhizome Cities project fosters inclusive development by connecting civil society, municipalities, and migrant communities in Europe. It uses colonial history **to enhance cultural exchange** and economic development, thereby reducing the legacy of colonization and strengthening ties between migrants and their countries of origin.

The Local Inclusion Plan for the Roma Community (PLICC) aims to **improve living conditions** and reduce inequalities for the Roma through intercultural mediation, educational support, job mentoring, and community engagement, targeting marginalized communities.

The IncluCities project enhances the integration of third-country nationals in mid-sized cities via city-to-city cooperation, improving policy delivery and coordination at different government levels to effectively address migration challenges.

In Czechia, the Agency for Social Inclusion assists local governments in fostering social inclusion through **service provision and employment promotion**, addressing social exclusion comprehensively through legislative proposals and projects.

The Positive Storytelling on Migration Toolkit **promotes a positive narrative on migration** through successful communication campaigns, interactive resources, and storytelling that shifts the migration discourse toward empathy.

Fundão Acolhe supports migrant integration through services tailored to legal status, housing, education, and employment needs, ensuring smooth integration and comprehensive migrant support.

To create fairer and more equitable environments, adopting strategies that promote diversity and inclusion is essential. This involves **investing in collaborative frameworks** to foster partnerships between local authorities, NGOs, and communities, addressing complex inclusion challenges holistically. Developing needs-based interventions based on a deep understanding of specific community needs ensures that programs are relevant and effective. Additionally, promoting knowledge sharing through platforms for exchanging best practices between cities and regions facilitates dialogue and the dissemination of successful strategies, inspiring and guiding further initiatives.

Empowering target groups is crucial. Involving beneficiaries in designing and implementing programs ensures relevance and impact. Giving these groups a voice makes programs more responsive to their actual needs and increases their likelihood of success.

Continuous monitoring and adaptation of programs are essential to maintain their effectiveness. Robust monitoring and evaluation frameworks help identify strengths and areas for improvement, ensuring programs adapt and stay relevant.

Shifting the narrative to promote positive stories about inclusion is necessary to combat prejudice and create a welcoming environment. Highlighting success stories and positive outcomes can change public perceptions and foster inclusivity.

These trends underline the importance of **collaborative, data-driven approaches to social inclusion**. Going forward, policymakers and practitioners should focus on scaling successful practices, exchanging knowledge, and continuously refining interventions through data analysis. By collaborating, stakeholders can build inclusive communities where everyone can thrive.

"Diversity enriches societies, and multicultural, multi-ethnic, and multireligious societies are stronger, more resilient, and more prosperous."

— ANTÓNIO GUTERRES (2018) MESSAGE ON THE INTERNATIONAL DAY FOR THE ELIMINATION OF RACIAL DISCRIMINATION

④

CITIZENSHIP PARTICIPATION

Best and New Practices on Citizenship Participation

CONTEXTUALIZATION

Active citizen participation is essential for building and strengthening democracy. It encompasses various forms, such as voting, engaging in public discussions, participating in community projects, and joining social movements (Baum, 2001). Active engagement in decisions that affect citizens' lives leads to a more inclusive and responsive society (OECD, 2022). Beyond political involvement, participation includes volunteering, civic education, and digital activism, allowing individuals to influence local and national issues, promoting transparency, accountability, and social justice (Foster, 1980). It also strengthens social connections across diverse groups (Holum, 2023).

Amid rapid technological advances and global challenges like the climate crisis and economic inequalities, citizen participation is increasingly critical (Sharp et al., 2022). Digital platforms have expanded participation, making decision-making more accessible (International Association for Public Participation, 2017). However, effective participation requires supportive structures that ensure all voices are heard, demanding equal access to education and information for meaningful contributions (OECD, 2020).

Citizen participation is vital for a healthy democracy and a fairer society (OECD, 2021). It is a shared responsibility that enhances public life and strengthens societal foundations (Correia et al., 2023).

#1
TITLE OF PROJECT / CASE STUDY

Participa.gov
Digital Public Participation Platform

Short description:

Instruments for public participation make it possible to encourage collaborative discussion between decision-makers and stakeholders, creating the ideal environment for obtaining more thoughtful and equitable decisions, avoiding institutional suspicion, increasing the likelihood of consensus, and consequently increasing the success of the policies themselves.

Best and new innovative practice:

The innovation consists of a Participa.gov platform built using highly secure eID mechanisms and blockchain technology, guaranteeing security, auditing and transparency in the process from start to finish. As the data is protected by cryptography and is therefore immutable, blockchain technologies, which enable citizens to participate publicly, can play an important role in connecting citizens with democracy.

Why is this the best and new innovative practice? The innovative nature of this project stems from three key features: Firstly, it centralizes all types of participatory digital public processes—from participatory budgeting and public consultations to GovTech challenges—on a single platform, applicable across various government levels, including central and local governments, schools, and public services.

[continued] Why is this the best and new innovative practice? Secondly, it incorporates blockchain technology, which, despite its growing popularity, remains underutilized in public sector projects. Thirdly, the integration of the national eID ecosystem not only enhances security but also enables greater customization of the initiatives proposed.

Results/ Outcomes/ Impacts: Implementing this platform could lead to significant cost reductions for public administration in the mid to long term. For example, if a platform costs about €40K and is adopted by over 18,000 public entities in Portugal, the savings could be substantial. Additionally, demographic trends and technological advancements are reshaping citizen communication and engagement with decision-makers. Traditional face-to-face participation is increasingly giving way to online civic engagement. By providing a simple, secure, and trustworthy platform, we not only keep pace with these changes but also enhance civic engagement in public policy, increasing its impact on decision-making.

Municipality, Country: All Municipalities, Portugal.

Source #1

#2

TITLE OF PROJECT / CASE STUDY

Diferenciar Coruche Strategy for Tourism 2021-2026

Short description:

Coruche's strategic tourism development plan aims to: prepare the destination for the new post-pandemic challenges, in order to maximise the territory's existing resources and ensure that the destination develops sustainably; structure and create a tourism product; attract investment; communicate consistently and always involve the community in decision-making processes.

Best and new innovative practice:

The new tourism strategy, Diferenciar Coruche, positions the municipality as a "Panoramic Destination," emphasizing its natural landscape. This strategy is guided by key aspects of the post-pandemic tourism ecosystem: fostering a more positive, sustainable, and beneficial form of tourism for both the territory and its communities.

Why is this the best and new innovative practice? This tourism development strategy was featured as a good practice in the October 2022 edition of the World Tourism Organization (UNWTO) newsletter. Circulated globally among the tourism sector and over 500 UNWTO members, the publication praised the strategy's innovative approach. Key highlights include using residents as a barometer for destination success and strategically focusing on 12 unique resources exclusive to Coruche.

Results/ Outcomes/ Impacts: Positive perceptions of tourism development among residents: 95% report a significant improvement in tourism dynamics since 2021; 85% feel there is a balance between their needs and those of tourists; 90% recognize socio-cultural and environmental benefits from tourism in Coruche; 95% believe tourism is crucial for boosting the economy, creating jobs, and curbing population decline in Coruche; 80% think cultural elements are effectively promoted by the destination; 80% feel involved and heard in the tourism development process.

Municipality, Country: Coruche, Portugal.

Source #2

#3
TITLE OF PROJECT / CASE STUDY

PIH
Porto Innovation Hub

Short description:

The city of Porto intends to stand out in the national and international panorama as a city of innovation and creativity. A true innovation aggregator, where the city functions as a living laboratory, citizens challenge businesses, entrepreneurs and the Municipality of Porto, where the connections foster real problem solving, impacting the city, with a strong capacity for replication and creation of differentiating businesses. Currently, the Municipality of Porto's transversal objective is to invest in participatory innovation as support for the development of new projects focused on improving citizens' quality of life and increasing the efficiency of services.

Best and new innovative practice:

The PIH functions as a platform for experimenting with technology-based solutions, in other words, a real living laboratory that stimulates initiatives to respond to the challenges faced by the city. To fulfil this purpose, the PIH involves the various innovation agents, from leaders to makers, citizens and city leaders, in co-creation actions for creative solutions that improve the quality of life in the city.

Why is this the best and new innovative practice? The PIH showcases the transformative power of innovation in cities, highlighting its direct impact on enhancing citizens' quality of life, creating skilled jobs, and elevating cities to new developmental heights. Presently, the Municipality of Porto prioritizes investing in participatory innovation to support the development of new projects aimed at improving the quality of life and enhancing service efficiency.

Results/ Outcomes/ Impacts: So far, the centre has already had 2.500 participants, 8 projects, 4 laboratories and 56 activities.

Municipality, Country: Porto, Portugal.

Source #3

#4
TITLE OF PROJECT / CASE STUDY

Câmara Municipal de Odemira - Participatory Budget

Short description:

Participatory Budgeting is part of the Odemira municipality's strategy for action, boosting citizen participation through positive and constructive factors, based on the principles of proximity, transparency and opportunity.

Best and new innovative practice:

It is the world's first participatory budget at national level, allowing citizens to propose and vote on ideas for public investments financed by Portugal's State Budget.

Why is this the best and new innovative practice? This initiative, funded by the national state budget and open to all government areas, enables citizens to directly influence how a portion of the Portuguese state budget is allocated. Its central tool, an online portal, serves three main purposes: it consolidates all project information, allows citizens to submit proposal ideas, and enables them to vote on which government projects should be implemented, with voting also available via free SMS. The PPB portal has effectively used ICTs to enhance openness, transparency, and inclusion, fostering active citizen engagement.

Results/ Outcomes/ Impacts: Residents participated with 57 proposals related to climate mitigation or adaptation. In addition to these, another 13 projects were proposed in other years based on climate issues, totalling 70 climate-related proposals. 8 climate projects were approved through participatory budgeting.

Municipality, Country: Odemira, Portugal.

Source #4

#5
TITLE OF PROJECT / CASE STUDY

CityScope FindingPlaces: HCI Platform for Public Participation in Refugees' Accommodation Process

Short description:

The ongoing influx of asylum seekers presented significant challenges for German federal and municipal authorities, leading to ad-hoc solutions where refugees were often housed in tents, warehouses, or gymnasiums. In response, Hamburg's mayor Olaf Scholz tasked MIT and HCU CSL with developing a participation process called 'FindingPlaces'. This initiative aimed to involve citizens in identifying accommodation solutions for an anticipated 79,000 refugees. The process was designed to integrate citizens' personal experiences and local knowledge into the evaluation of potential sites, with the aim that the outcomes and proposals generated would inform and guide political decision-making.

Best and new innovative practice:

CityScope is ongoing research in the City Science group at the MIT Media Lab, presenting different iterations of an urban simulation platform with the aim of making complex urban issues accessible and tangible to various audiences. What sets CityScope apart from other highly specialised, expert-focused planning tools is its tangible, user-oriented design, provoking discussion not limited by experience or prior knowledge. The use of the CityScope platform for refugee accommodation has shown how digital technology can effectively support social challenges and physical change.

Why is this the best and new innovative practice? CityScope FindingPlaces redefines public participation in urban planning. Traditional planning often limits public input and the exploration of alternatives. CityScope stands out for its accessibility, tangibility, and simplicity in tackling complex urban issues. The FindingPlaces methodology enabled in-depth discussions between experts and non-experts, fostering evidence-based, goal-oriented interactions. For this project, CityScope was enhanced with features such as networked device communication, Geographic Information System (GIS) integration, and persistent data management, maintaining its core functionality while expanding its capabilities.

Results/ Outcomes/ Impacts: Proposed accommodation solutions for almost 24.000 refugees , exceeding the initial targeted goal of 20.000.

Municipality, Country: Hamburg, Germany.

Source #5

#6

TITLE OF PROJECT / CASE STUDY

Gemeinsame Digital Berlin Smart City Strategy

Short description:

The Gemeinsam Digital: Berlin (Together Digital: Berlin) strategy is a transformation program. Berlin's digital transformation can only succeed if all the stakeholders involved are willing to engage in a collective learning process. Consequently, the strategy itself is also designed as a learning strategy. Based on a comprehensive monitoring system, the strategy and its tools, as well as individual projects, are to be evaluated and adapted in regular cycles. This strategy does not replace specialized strategies, such as the digital inclusion strategy, the open data strategy or the cybersecurity strategy. Nonetheless, it sets the framework for their implementation and is complemented by these specialized strategies.

Best and new innovative practice:

The Gemeinsam Digital: Berlin strategy offers not only the vision of a smart Berlin and the goals needed to get there, but also a process that unites the capital's diverse perspectives and strengths while jointly testing new tools. We make the administration an "enabler", tackling urban development and digitalisation together, while working on the digital transformation together with the entire city. These are complex tasks that require creative and innovative solutions. Our goal is a functional city - in the face of a moment Berlin hasn't seen in recent years and crises that will continually confront us with major challenges.

Why is this the best and new innovative practice? Berlin's definition of a smart city goes beyond just "digital" to address future challenges creatively, openly, purposefully, and participatively. Digital technologies are crucial for the sustainable and community-focused transformation of the city but are not the sole focus. The digital transformation considers the needs and interests of Berlin's residents, business community, scientific institutions, and civil society. The strategy was formed through a broad participatory process.

Results/ Outcomes/ Impacts: Bilingual manual covers various complex projects, like redesigning a square, establishing new communication systems, or introducing new forms of energy supply. These are relevant not only in Berlin but also in other cities, municipalities, governmental bodies, companies, and civil society organizations. The manual aids diverse target groups in efficiently implementing their initiatives. The Smart City Berlin network boasts about 150 institutional members.

Municipality, Country: Berlin, Germany.

Source #6

#7

Casulo Incubadora de Inovação Social

Short description:

Casulo is an incubator in Loulé that fosters social innovation by supporting entrepreneurs and organisations in developing sustainable solutions to social challenges, always in line with the Sustainable Development Goals.

Best and new innovative practice:

One innovative practice implemented by Casulo could be its incubation model, which integrates technology and community collaboration to accelerate social solutions. This model can include workshops, networking events and strategic partnerships with local and international organisations.

Why is this the best and new innovative practice? It is considered innovative because it combines technical support with a strong community component, thus facilitating a faster and more efficient response to social challenges. In addition, the inclusion of emerging technologies and methods of collaboration between different sectors may be creating new paths for social innovation.

Results/ Outcomes/ Impacts: Casulo's results include the launch of several successful social start-ups, significant improvements in local quality of life and increased social cohesion in Loulé. Additionally, the project could be influencing public policy and promoting a more robust social innovation culture in the region.

Municipality, Country: Loulé, Portugal.

Source #7

IN CONCLUSION

Trends Analysis and Guidelines

The modernization of public services through technology integration has significantly transformed citizen-government interactions, leading to more efficient and inclusive administration. Various innovative initiatives reveal trends in the increasing digitalization and democratization of public service access.

The Participa.gov initiative in Portugal demonstrates how **blockchain technology can enhance transparency and security in public participation platforms**. This project utilizes secure electronic identification and blockchain to ensure that all processes are auditable and transparent from start to finish. The **adoption of decentralized technologies** in public services marks a shift toward more secure and transparent systems, enhancing public trust.

The Diferenciar Coruche tourism strategy in Portugal shows how tourism can be developed sustainably with community involvement. By focusing on local natural and cultural resources and involving the community in decision-making, Coruche is creating a model for tourism development that benefits both residents and visitors. This strategy reflects global trends in **responsible and sustainable tourism**, aimed at minimizing environmental impacts and maximizing local community benefits.

The Porto Innovation Hub exemplifies cities as living laboratories where collaboration between citizens, businesses, and government can generate innovative urban solutions. This initiative highlights the importance of **participatory innovation in enhancing urban life** and creating replicable open innovation environments.

The Participatory Budgeting of Câmara Municipal de Odemira is noteworthy as Portugal's first national-level participatory budget, allowing citizens to propose and vote on public investment ideas. This model enhances transparency and inclusion, fostering **active citizenship and open public management**.

In Hamburg, the CityScope FindingPlaces project, developed by MIT Media Lab, introduces a new approach to public participation in complex planning. Using an urban simulation platform, it allows those without specialized knowledge **to effectively engage in decision-making**. The project is noted for its

user-centered design and ability to facilitate significant discussions, contributing to housing solutions for nearly 24,000 refugees.

Gemeinsam Digital: Berlin represents a comprehensive strategy for digital transformation, viewing it as a collective learning process that involves all stakeholders in shaping a smart city. This strategy creatively addresses future challenges and integrates diverse perspectives for sustainable, community-oriented development.

In Loulé, Portugal, the Casulo social innovation incubator supports social entrepreneurs in using emerging technologies and community collaboration to address social issues, enhancing public service access and efficiency in line with the Sustainable Development Goals.

These examples illustrate the power of combining technology, citizen participation, and inclusivity, proving that innovation involves new methods of thinking and collaboration. They reflect a broader trend towards digital transformation in public services, aimed at enhancing efficiency, reducing costs, and making government more responsive.

Recommendations include adopting flexible, inclusive technologies to ensure broad public service access, fostering co-creation to develop local solutions through open innovation, and integrating technologies like blockchain for transparency and trust in public institutions. Projects should align **economic growth with social and environmental responsibility, and a strong focus on ethical innovation is vital to ensure responsible technology use and prevent exacerbating inequalities**.

Implementing these recommendations will help governments maximize technological benefits, keep pace with rapid changes, and effectively meet citizens' needs and expectations.

"Engaging citizens in public decision-making not only leads to better policies but also strengthens trust in government and democracy."

— OCDE (2022) GLOBAL TRENDS IN GOVERNMENT INNOVATION

⑤

FINAL CONSIDERATIONS

General Highlights and Conclusions

This benchmarking report highlights several innovative practices, trends, and recommendations aimed at enhancing public administration and fostering inclusive, sustainable development.

The main dimensions analyzed in this guide are Environmental Sustainability, Diversity and Inclusion, and Citizenship Participation.

The search and selection process revealed an asymmetry in the number of good practices found: 7 in citizenship participation, 9 in diversity and inclusion, and 20 in environmental sustainability.

This discrepancy likely stems from the urgency to meet international environmental commitments amid a global climate crisis, emphasizing the importance of aligning local policies with international agreements like the Paris Agreement and the United Nations Sustainable Development Goals.

As we navigate the evolving landscape of digital transformation and technological innovation, both challenges and opportunities are evident for local administrations in Europe.

Key **insights** include:

•   **Adopting Flexible Technologies:** Investing in adaptable platforms is crucial for inclusion and accessibility, ensuring all citizens can access public services efficiently, regardless of their digital skills.

•   **Multi-Stakeholder Collaboration:** Successful partnerships between local authorities, NGOs, educational institutions, and communities are essential for addressing complex challenges and developing tailored, impactful solutions.

•   **Citizen Participation and Empowerment:** Integrating active citizen engagement in public policy leads to more inclusive and responsive governance. Initiatives like "BiodiverCities" and "Lisboa Bike Sharing" highlight the benefits of involving citizens in urban solution co-creation.

•   **Data-Driven Strategies:** Using data to assess and enhance interventions strengthens inclusivity. Projects like "Águeda Smart City" show how technology and data can improve urban management and quality of life.

Based on the practices reviewed, several **recommendations** emerge:

•   **Invest in Collaborative Frameworks:** Encourage partnerships among various stakeholders to effectively address inclusion challenges. Collaboration fosters innovation and ensures diverse perspectives in problem-solving.

•   **Develop Needs-Based Interventions:** Design programs based on a deep understanding of target group needs to ensure meaningful and sustainable outcomes.

•   **Promote Knowledge Sharing:** Create platforms for exchanging best practices and expertise among cities and regions to foster continuous improvement and broader impact.

•   **Prioritize Empowerment:** Actively involve beneficiaries in program design and implementation to ensure relevance and effectiveness, enhancing ownership and sustainability of initiatives.

•   **Monitor and Adapt Programs:** Regularly assess program effectiveness using data-driven analysis to allow for timely adjustments and improvements.

The rapid pace of technological advancement requires a proactive and adaptive approach from public administrations. By embracing innovation, fostering collaboration, and prioritizing inclusivity, local governments can better meet their communities' evolving needs. Balancing technological growth with social and environmental responsibility ensures that the benefits of innovation are equitably distributed and positively impact society. Implementing these recommendations will help maximize technological advancements' benefits while mitigating associated risks, leading to more resilient and sustainable communities.

Finally, promoting positive stories about inclusivity and sustainability helps combat prejudice and fosters a more welcoming environment. This narrative shift is crucial for building empathy and understanding within communities.

"(...) innovation helps governments to be more agile in responding to immediate, politically driven priorities, as well as tackling longer-term, complex, and cross-cutting challenges."

— OCDE (2020) EMBRACING INNOVATION IN GOVERNMENT: GLOBAL TRENDS

BENCHMARKING REPORT

References

1. Accenture. (2007). The secrets of successful government transformation. Accenture.

2. Dowbor, L., & Pochmann, M. (Eds.). (2010). Políticas para o desenvolvimento local. São Paulo, Brazil: Fundação Perseu Abramo.

3. Einstein, A. (1934). The world as I see it. New York, NY: Philosophical Library.

4. Fagerberg, J. (2017). Innovation policy: Rationales, lessons and challenges. Journal of Economic Surveys, 31(2), 497–512. https://doi.org/10.1111/joes.12164

5. Federal Government of Germany. (2023). Future research and innovation strategy. Berlin, Germany: Author.

6. Freie Hansestadt Bremen. (2021). Schlüssel für Innovationen 2030: Strategie für Innovationen, Dienstleistungen und Industrie im Land Bremen. Bremen, Germany: Author.

7. Guterres, A. (2018, March 21). Message on the International Day for the Elimination of Racial Discrimination. United Nations. Retrieved from https://www.un.org/en/observances/end-racism-day/messages

8. Kadečka, S. (2012). Czech municipal law. Prague, Czech Republic: Wolters Kluwer.

9. Lundvall, B.-Å., & Borrás, S. (2005). Science, technology, and innovation policy. In J. Fagerberg, D. C. Mowery, & R. R. Nelson (Eds.), The Oxford handbook of innovation (pp. 599–631). Oxford, UK: Oxford University Press.

10. Organisation for Economic Co-operation and Development. (2009). Policy responses to the economic crisis: Investing in innovation for long-term growth. Paris, France: OECD Publishing. Retrieved from http://www.oecd.org/sti/42983414.pdf

11. Organisation for Economic Co-operation and Development. (2020). Embracing innovation in government: Global trends 2020. Paris, France: OECD Publishing.

12. Organisation for Economic Co-operation and Development. (2022). Global trends in government innovation. Paris, France: OECD Observatory of Public Sector Innovation.

13. Reis, C. A. B., & Reis, A. P. (2005). O benchmarking como instrumento de melhoria contínua. Revista Portuguesa de Gestão, 20(2), 45–58.

14. Speth, J. G. (2008). The bridge at the edge of the world: Capitalism, the environment, and crossing from crisis to sustainability. New Haven, CT: Yale University Press.

15. Teles, F. (2021). Descentralização e poder local em Portugal. Lisboa, Portugal: Fundação Francisco Manuel dos Santos.

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