# Research Project Policy & Governance Innovation:

Definitions and Examples in the climate space

Southern Europe focus









### About the authors

This report was written by an interdisciplinary team formed by Carlos Mataix Aldeanueva, PhD, Fernando Monge, Cecilia Lopez Pablos (Innovation and Technology for Development Centre – Universidad Politécnica de Madrid (Technical University of Madrid), Gorka Espiau Idoiaga and Karmele Olabarrieta (Agirre Lehendakaria Center for Social and Political Studies – University of Basque Country).

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For further information, contact Cecilia Lopez Pablos at cn.lopez@upm.es

**Graphic design**: Gabriel Izquierdo (Gabiland).

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## **Executive summary**

The purpose of this report is to conceptualise and learn from 'policy and governance innovation' efforts - with a particular focus on Southern Europe and on the climate challenge

This report delineates the contours of such concepts by (i) exploring the practitioner and academic literature, and (ii) analysing a set of cases in Southern Europe where innovations in governance structures and policy design mechanisms have had a positive impact in dealing with climate change.

The first conclusion after analysing the literature is that there is no established and agreed upon definition of 'policy and governance innovation'. Elements of such an approach can be found across a diverse set of terms (policy innovation, innovation in government, governance innovations, creative bureaucracies, etc.). These definitions have a clear focus on services and processes, with less attention to key concepts such as user-centric, citizen, systemic change, value and cultural changes, co-creation, etc.

The concept of policy and governance innovation that we aim to define, by contrast, does focus on those deeper building blocks of government action. As such, any conceptualisation of policy and governance innovation needs to lie between the broader social innovation and the narrower public sector innovation concepts.

Based on this conceptualisation, the paper subsequently introduces an overview of "Key Dimensions of policy and governance innovation," including a set of tools and mechanisms organised in five groups:

- New approaches to the diagnosis of the problem and the conceptualisation process
- New co-creation and prototyping capabilities in five interconnected levels
- New portfolio approach
- New management approaches
- Transformative Capital

These dimensions are then identified and analysed in more detail in five selected case studies in three countries (Spain, Italy and France).

An overarching theme emerging across the literature and practice is a wide-reaching consensus that technological solutions alone will not make the quick transformation needed. Governments have to be the key enablers of this shift, and that requires changing their own structures and capacities first.









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# Conceptualising policy and governance innovation to tackle climate change

Since the original formulation of the idea of "wicked problems" by Churchman and Rittel & Webber in the late 60's and early 70's <sup>2</sup>, there is an increasing recognition that our prevailing governance structures and policy design mechanisms are ineffective for tackling the most entrenched societal challenges. Among them, climate change is arguably "the most" wicked problem, or at the very least, the most pressing wicked problem of our times, given that our survival as a species depends on whether we are able to solve it within a certain timeline.

There is little controversy about the complexity of climate change, and broad consensus that tackling it will require coming up with new modes of governance. Yet, what the new governance structures and policy mechanisms ought to be remains undefined. Even what we mean by governance and policy innovation is up for grabs and may vary across geographies. This report presents an attempt to delineate the contours of such concepts by (i) exploring the practitioner and academic literature, and (ii) analysing a set of cases in Southern Europe where innovations in governance structures and policy design mechanisms have had a positive impact in dealing with climate change.

The first conclusion after analysing the literature is that there is no established and agreed upon definition of policy and governance innovation. Elements of such an approach can be found across a diverse set of terms (policy innovation, innovation in government, governance innovations, creative bureaucracies, etc.). Most of these definitions tend to focus on a particular aspect of novelties in the way governments are run or deliver their services. Distilling a concept from this constellation of terms has proven difficult. Our alternative approach, therefore, has been to situate the definition with reference to two broader and bet-

ter-established concepts: social innovation and public sector innovation.

The European Commission defines **social innovation** as: "the development and implementation of new ideas (products, services and models) to meet social needs and create new social relationships or collaborations. Not only are these innovations good for society, they also improve its ability to act." <sup>3</sup> The concept of social innovation is broad, which also results in a diversity of definitions, methodologies and evaluation frameworks, but does not necessarily consider government and policy as key to its definition. In other words, the development and implementation of new ideas can come from or be promoted by governments, but it is not an essential feature of the definition, and therefore is broader than the idea of policy and governance innovation.

Turning to governments and public sector institutions, then, we analyse a second term: public sector innovation. The concept of public sector innovation became popular in the 1980s, when the New Public Management movement aimed to modernise the public administration by incorporating some approaches from the private sector, but it has deeply evolved over the last four decades. The OECD, one of the institutions with more dedicated focus and resources to public sector innovation, defines the concept as: "The implementation by a public sector organisation of new or significantly improved processes, methods or services aimed at improving a public sector unit's operations or outcomes. Public sector innovation involves significant improvements in the services that the government has a responsibility to provide, including those delivered by third parties. It covers both the content of these services and the instruments used to deliver them."4

https://www.oecd-opsi.org/







<sup>&</sup>lt;sup>2</sup> Churchman, C., (1967). Wicked Problems. Management Science, 4(14)B141-142, and Rittel & Webber (1973) Dilemmas in a general theory of planning. Policy Sciences, 4(2)155-169

<sup>&</sup>lt;sup>3</sup> https://ec.europa.eu/social/main.jsp?catId=1022&langId=en



This definition points to an important distinction made by the European Commission between innovation *in* the public sector (focussed on enhancing public sector efficiency and improving services and outcomes for citizens) and innovation **through** the public sector (focussed on the actions by governments to foster innovation in other sectors). The OECD's definition aligns with the idea of innovation in the public sector. Of course, this does not mean that the innovation only seeks to change internal aspects of government; it explicitly seeks to change services and outcomes for citizens. The idea of policy and governance innovation also follows this logic.

As shown in a report on trends of public sector innovation commissioned by the EU, the approach to public sector varies across geographies.<sup>6</sup> In most countries, the prevailing understanding of the concept focusses

on the improvement of services and processes, particularly through the introduction of new management tools and technologies. In recent years, however, the most advanced countries have increasingly turned their attention to the change in governance structures and policy creation processes. Such approaches tend to be more frequent in Northern European countries, but even southern European countries like Spain include in their definition "systemic innovations, implying changes that affect the system as a whole, or large parts of it."

Despite this more advanced definition, Southern European countries still lag behind in the development of concepts around policy and governance innovation. For example, in one of the most thorough reviews of the academic literature on public innovation, conducted by Hanna De Vries, Victor Bekkers and Lars Tummers <sup>7</sup>,

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<sup>&</sup>lt;sup>5</sup> European Commission (2013) Powering European Public Sector Innovation: Towards a New Architecture. Report of the Expert Group on Public Sector Innovation.

<sup>&</sup>lt;sup>7</sup> In which they reviewed 181 articles and books on public sector innovation published between 1990 and 2014.







<sup>&</sup>lt;sup>6</sup> European Commission (2012) *Trends and Challenges of Public Sector Innovation in Europe.* Thematic Report 2012 under Specific Contract for the Integration of INNO Policy TrendChart with ERAWATCH (2011- 2012).

none of the listed references is by an Italian, Portuguese or Spanish author. Likewise, key actors in the Spanish public administration space, such as Novagob or the Institute for Public Administration (INAP), have definitions focussed predominantly on service and process improvement through top-down policy making and design. Within Spain, the Basque Country's Agency for Innovation (INNOBASQUE), which incorporates ideas around citizen-centred policy design and co-participation as core to its definitions of public sector innovation, and Portugal, with its Lab for experimentation in the public sector (LabX or Laboratório de Experimentação da Administração Pública), seem to be the exception that confirms the rule.

In fact, a word cloud formed by the definitions derived from a sample of academic and practitioner papers in Southern Europe (see Figure 2) shows the clear focus on services and processes and a still scarce attention to key concepts such as user-centric, citizen, systemic change, value and cultural changes, co-creation, etc. We can conclude, therefore, that even if some of these concepts are starting to emerge, they are not yet mainstream in the conceptualisation of policy and governance innovation in Southern Europe.

The conclusions about the review of the academic and practitioner literatures in Southern Europe can be applied to most common definitions of public sector innovation, still too narrow in focus, and certainly



Figure 2: Word cloud. Prepared by the authors, references in Appendix 1.







too limited for the type of systemic changes required by wicked societal problems like climate change. They centre on changing processes, services and products to improve the impact on citizens, but do not focus on changing the institutions, paradigms, norms, beliefs and values underpinning the governance structures and policy mechanisms through which those services and products are designed and delivered. The concept of policy and governance innovation that we aim to define here, by contrast, does focus on those deeper building-blocks of government action. As such, any conceptualisation of policy and governance innovation needs to lie between the broader social innovation and the narrower public sector innovation concepts (see Figure 3).

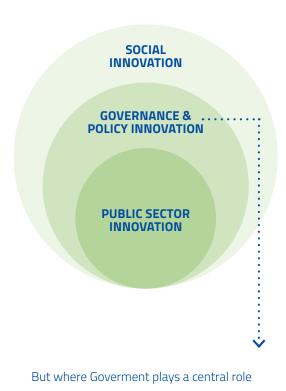




Figure 3: Conceptualization of policy and governance innovation. Prepared by the authors.







Acknowledging the limitations of traditional definitions of public sector innovation, in some of its latest works, the OECD has advocated for a systems approach to public sector challenges 8. One that "calls for constant adjustment throughout the policy cycle, with implications for the ways in which institutions, processes, skills and actors are organized [...] Additionally, new, more agile and iterative financing measures must be created to support the use of systems approaches [...] To effect systems change, administrations must develop a vision for a desired future outcome, define the principles according to which that future system will operate, and start to implement a set of interventions that will transform the existing system into the future system." Similarly, the water of systems change model 9 argues that without changing the implicit foundation of a system anchored in mental models, we cannot unleash the transformative change that would eventually stream down to affect the system's explicit structure.

Building on these ideas, we can conclude that **policy** and governance innovation entails *purposefully* 

reformulating the prevailing mental models to unlock new paradigms in institutions, laws, policies, financing and governance structures that enable systems change at the societal level <sup>10</sup>.

When defining policy and governance innovation in this way, it may be helpful to think about different tiers of transformation as developed by RAND Corporation: "Tier 1 represents actions that can be taken by existing departments in city government, existing groups, and collaborations among them, without changes in laws or any significant change in policy or budgetary allocations. Tier 2 represents actions that involve relatively minor changes in law or institutional structure at the local, state, or national level. Tier 3 involves more significant changes in laws, regulations, funding, and institutions at the state and national levels in which the cities operate; the economic environment; and the broader social and political context, including, for instance, trust in government, the authority of science, and the degree of civic involvement." 11 (See Figure 4).

<sup>11</sup> Knopman and Lempert (2016) Urban Responses to Climate Change: Framework for Decision-making and Supporting Indicators. RAND Corporation, Santa Monica, CA.







<sup>&</sup>lt;sup>8</sup> OECD (2017), Systems Approaches to Public Sector Challenges: Working with Change. OECD Publishing, Paris.

<sup>&</sup>lt;sup>9</sup> Kania, Kramer & Senge (2018) *The Water of Systems Change*. FSG

<sup>10</sup> Concurrently, institutions, laws, policies, financing and governance structures will need to shape and enable the formation of new mental models and paradigms through a mutually reinforcing cycle



Figure 4: Tiers of transformation. Source: Knopman and Lempert (2016) *Urban Responses to Climate Change: Framework for Decision-making and Supporting Indicators*. RAND Corporation, Santa Monica, CA.

Without promoting innovation at the top level of the system's structure we cannot sustain change at the ground-level, and therefore, our definition of policy and governance innovation refers, ideally, to the transformations happening at tier 3. Yet, action in each tier cannot be thought of as completely isolated from the other tiers. Evidently, innovations in tier 3 will lead to transformations that trickle down in tier 2 and 1, but simpler or more moderate changes may also be instrumental in enabling the paradigm shifts that lead to new governance structures and policy design mechanisms.

Changes at the top tier will require profound transformations in the current management procedures but most importantly exploring new ways of understanding and integrating the cultural dimension of innovation processes: behaviours, beliefs and value

systems. In doing so, narratives of change - the set of ideas, concepts and stories about societal transformation — serve as creators of shared sense among the community, de-activators of pre-existing models and guides to action. Obviously, changing mental models takes time and the actual interventions that can shape them are neither evident nor linear. Therefore, most governance and policy innovations, including the ones analysed in this report, act simultaneously at different tiers of transformation; a factor that should be taken into account both when reading the cases as well as when trying to apply some of these ideas elsewhere.

In the following section, we unpack the key dimensions that we have identified - both in the literature and in the analysed cases - as key to our definition of policy and governance innovation.







# Key constitutive dimensions of policy and governance innovation

This section examines some of the core dimensions of policy and governance innovation that public institutions are exploring and starting to incorporate into their practices. Few institutions display a full development of all of them simultaneously, but a profoundly systemic change would need at least substantial progress in several of them. Some examples that illustrate the different dimension types are included in the table provided below the introductory paragraphs.

2.1.- New approaches to the diagnosis of the policy problem and the conceptualisation process. Public institutions are realizing that long term and wicked challenges such as climate change cannot be positively addressed exclusively by applying the latest technological solutions. A deeper understanding of the social, economic and environmental dynamics that are conditioning the evolution of these complex challenges is necessary during the entire policy process (not just at the beginning and at the end), and it has to go beyond traditional community participation and consultation mechanisms.

One example of an emerging approach includes a 'listening process': a set of qualitative tools that, when complemented with quantitative data, can unravel a community's narratives and reveal in-depth needs, challenges and opportunities.

2.2.- **New policy co-creation and prototyping capabilities in five interconnected levels.** Public institutions are complementing their efforts on redesigning existing services with similar co-creation and prototyping initiatives in (i) community innovation, (ii) entrepreneurship support, (iii) large scale public-private partnerships, (iv) public service redesign and

(v) new regulation. Those public authorities, illustrated in the cases below, are integrating some of these additional co-creation and prototyping dimensions into their work and perceive that they can develop a more comprehensive strategy, diminishing risk and attracting new funders interested in experimenting with a complex systems approach.

Since innovation necessarily destabilises existing operational, organisational and administrative structures <sup>12</sup>, accessing the know-how, craftsmanship and experience to integrate these levels through connected co-creation and prototyping requires new capabilities in public organisations.

- 2.3.– **New portfolio approach**. Isolated project-based or siloed departmental policy approaches can hardly operate at the scale and multi-dimensional level required by wicked problems that require systemic change. Therefore, and as highlighted by EIT Climate-KIC <sup>13</sup>, projects and policies need to be integrated and conceptualised as an interconnected portfolio. As with co-creation and prototyping practises, this novel portfolio approach also requires new capabilities to design, manage and evaluate the interconnected and integrated set of projects with a holistic vision.
- 2.4.- **New management approaches**. As indicated, governance and policy innovation demands new management approaches that move away from command and control methods of policymaking and that are built on convening power and soft leadership. They require integrating performance, evaluation and communication <sup>14</sup>, with a complexity-aware approach to monitoring, evaluation, and, particularly, to learning and adaptation <sup>15</sup>. In these new management approaches, evaluation







methods such as developmental evaluation tools permit real-time decision-making to match strategy to changes in the system. Measurement mechanisms and metrics are re-tailored as targets evolve, and are designed to identify system dynamics, interdependencies and emerging connections, recognising the complexity of the system and the particularities of the context <sup>16</sup>.

2.5.- **Transformative capital**. Finally, innovating at the systemic level in governance and policy requires

tapping into new ways of understanding the role of "transformative capital" <sup>17</sup>, as well as aligning new investment resources to a different way of operating <sup>18</sup>.

The following table summarises the core dimensions of policy and governance innovation at a systemic level and lists potential examples of the practical applications that can be observed in practise [and that the team is searching for in the analysed cases that follow].

<sup>18</sup> See, for example, https://www.climate-kic.org/areas-of-focus/decision-metrics-finance/our-initiatives/mission-finance/







<sup>&</sup>lt;sup>12</sup> Jesper Christiansen and Laura Bunt (2012).

<sup>&</sup>lt;sup>13</sup> Transformation, in time, EIT Climate-KIC Strategy 2019-2022.

<sup>14</sup> The communication should document the innovation process 'internally' (e.g. changes in the way organisations work) and 'externally,' and facilitate and encourage community involvement and participation.

<sup>&</sup>lt;sup>15</sup> Fisher Joshua (2018), *Platforms that trigger innovation*, Chapter 6. Fundación Bancaria la "Caixa", Madrid, ES.

<sup>16</sup> This type of evaluation approach is complementary to traditional mandatory accountability mechanisms that are still in place and necessary in public administrations.

<sup>17</sup> https://www.climate-kic.org/insights/transformation-capital/

CORE KEY DIMENSIONS OF P&G INNOVATION	PRACTICAL APPLICATIONS
New approaches to the diagnosis of the problem and the conceptualisation process	Deeper community listening processes Citizen Assemblies Collective interpretation (sense making) Text mining, web scraping, setting up user/community profiles based on clustering, correlations, etc. Visualisation tools (i.e. Tableau) Forms of data normalization and processing procedures. Citizen engagement platforms New narrative crafting
New co-creation and prototyping capabilities in five interconnected levels	Co-creation Co-production Stakeholder diversity Partnerships, joint ventures, etc. Incubators and Acceleration labs Sandboxes Anticipatory regulation Creative application of existing regulation
New portfolio approach	Integrated approaches Mechanisms to connect different prototypes or experiments.
New management approaches	Facilitation role of public institutions in implementing initiatives, supporting connections of different financial actors, maintaining external consultant's board (not consultancy). Soft leadership and multilevel governance strategies.  Experience reports, robust set of indicators, qualitative evaluation Measure the changes of citizens' perceptions (Most Significant Change technique)  Mechanism to share learnings, open data on results and advances.  Diffusion of success stories of success and the evolution of experiences.
Transformative Capital	Crowdfunding Social impact bonds Impact investment Portfolio approaches to leverage resources Prizes Tax incentives – fiscal regime modification







Of course, very few, if any, real world examples display a full development in all of these dimensions of policy and governance innovation at a systemic level. This report does not therefore seek to find examples that cover all the dimensions, but rather to identify and describe

existing initiatives that show substantial progress in several of these dimensions, in particular connected to tackling climate change. The next sections describe the methodology for the selection of the cases as well as an in-depth explanation of some of them.









# In-depth Analyses of the Selected Cases

Following an initial pre-selection of 15 cases resulting from desk research and consultations with experts and EIT Climate-KIC partners <sup>19</sup>, a second selection of five cases was made, taking into account geographic location, key dimensions identified and information availability. The next pages present these five case studies developed in depth:

- 1 Tropa Verde in Galician Municipalities
- 2 Udalsarea 2030 network
- 3 City of Bologna
- 4 MIND Milan Innovation District
- **5** Greening of Paris

<sup>&</sup>lt;sup>19</sup> Spain: Bilbao's transformation, *Tropo Verde* in Galician municipalities, Udal-sarea network, Barcelona Pla Clima, Barcelona recycling coupons; Italy: Milan Congestion Pricing, MIND Milan, Udine The playful paradigm, Rome Urban and Peri-urban resilient agriculture, Bologna Regulation on civic collaboration for the urban commons; Portugal: Lisbon Participatory Budget, Strategic Council of Sintra, Living Lab Carbono Zero of Matosinhos; Greece: Athens Citizen engagement; France: Greening of Paris.







CASE STUDY 1: TROPA VERDE IN GALICIAN MUNICIPALITIES	
Brief summary of the initiative/ project	This case shows how an online platform, combined with a narrative of change deeply ingrained in the beliefs and values of the territory, can support a city authority to transform attitudes and behaviours of the community to make them environmentally conscious and responsible.
Core key dimension of governance and policy innovation	<ul> <li>New approaches to the diagnosis of the problem and the conceptualisation process</li> <li>New management approaches</li> </ul>
Promoter(s) (challenge owner) & Stakeholders	Promoters: City of Santiago (also convener) and Teima Desenvolvemento (also technical support & marketing). Stakeholders: local businesses (sponsors), municipal waste collection agencies (enablers), schools and civic centres (education and awareness), and citizens (users and recyclers).
Geographical range	Local and regional
Gender and inclusion perspective	No information available.
Lessons learned / Obstacles	Lessons learned:  - Importance of connecting initiatives - particularly those focussed on shaping behaviours - with cultural values and identity, which may require lessening the "environmental focus" and approaching it through a community preservation lens.  - Ability of a platform approach to enable cross-learning, co-creation mechanisms and exponential diffusion channels.  Obstacles:  - Difficult to replicate without the cultural connection element in other contexts where the technology is transplanted without a much more nuanced understanding and fine-grained strategy towards implementation.  - Not clear whether this can be carried out at scale in larger cities or geographic units.







#### Description and highlights of the case

Tropa Verde is a bottom-up innovation seeking to shape cultural norms and behaviours to enable the creation of a circular economy at the local level, driven by the City Authority. Through an online platform, citizens obtain rewards for environmentally responsible actions. Those rewards can be transformed into goods and services with public institutions or local businesses, thus closing the loop by promoting responsible and local consumption.

Tropa Verde also engages with the community through educational programmes and practical workshops to help cement environmentally responsible consumption behaviour. Since its inception, more than 2,500 users received over 16,000 vouchers, which were exchanged for rewards and prizes offered by 115 sponsors. The initiative has been recognised as a "Good Practice" by URBACT <sup>20</sup>. Originated in Santiago de Compostela, it has since expanded to five other Galician cities and is in the process of expanding to cities in five additional European countries.

### New approaches to the diagnosis of the problem and the conceptualisation process

Tropa Verde exemplifies a new process of problem diagnosis and conceptualisation at various levels. First, the initiative originated as a seed idea of the local waste management software company, Teimas Desenvolvemento, who partnered with the City of Santiago to explore how the combination of a technological solution with the instruments of the local government could be leveraged to improve citizens' behaviours and attitudes. The city was instrumental in providing institutional support and making it part of the city's environmental strategy. The early involvement of other stakeholders in the co-design of the project (such as the municipal recycling facilities, public socio-cultural centres that perform waste collection activities, and the non-profit environmentalist association ADEGA) was key to ensure the viability of the innovation.

Second, core to Tropa Verde is its focus on integrating the cultural dimension into the innovation pro-

cess by connecting with citizens' beliefs and value systems. The initiative not only generates incentives through the reward system, but it addresses the cultural dimension through a deep understanding of the local context. In a territory marked by a lack of culture of recycling and the presence of parallel illegal waste collection structures, the project team made a conscious effort to understand the citizens' value systems through detailed information gathering. Informed by this, Tropa Verde was framed less on environmental terms and rather on highlighting aspects related to the preservation of community assets and identity. For example, the project was deliberately launched on May 17th, a day that simultaneously commemorates Las Letras Gallegas (a local holiday to celebrate the Galician language and identity), Internet Day, and Recycling Day. This intentional story-telling and mental model shaping approach is also present in the awareness-raising campaigns, which take place during traditional festivities and are explained in the regional language.

#### New Management Approaches

Tropa Verde leverages the platform management approach to increase operational efficiency and facilitate connections, learning and experimentation among stakeholders. Different stakeholders can propose new uses of the platform to expand their reach and impact, creating opportunities for cross-learning and co-creation. For example, one school used Tropa Verde's platform and incentives framework to promote ideas on circular economy among students. Given its potential impact, this initiative was transformed into a school contest, where students competed to collect the highest amount of cooking oil for recycling purposes. In this way, through Tropa Verde, a single idea had a multiplier effect and the platform increased its reach in the city.

This exponential diffusion channel has increased the social support for and legitimacy of Tropa Verde among the citizenry, and has also showed other spill-over effects, such as the promotion of the local economy or more efficient use of public services through more cost-effective waste collection processes.

<sup>&</sup>lt;sup>20</sup> URBACT programme is the European Territorial Cooperation programme aiming to foster sustainable integrated urban development in cities across Europe. It is an instrument of the Cohesion Policy, co-financed by the European Regional Development Fund, the 28 Member States, Norway & Switzerland. More information at https://urbact.eu/







CASE STUDY 2: UDALSAREA 2030 NETWORK	
Brief summary of the initiative/ project	This case is a demonstration of good governance practices at a regional level in terms of sustainability promotion and cooperation between different municipalities and public agents, overcoming government and governance silos. The main added value of this specific case relies on the socioeconomic diversity between municipalities in the network.
Core key dimension of governance and policy innovation	<ul> <li>New approaches to the diagnosis of the problem and the conceptualisation process</li> <li>New co-creation and prototyping capabilities in 5 interconnected levels</li> <li>New management approaches</li> </ul>
Promoter(s) (challenge owner) & Stakeholders	Promoter: Ihobe, Public Environmental Company under the Basque Government's Ministry for the Environment, Territorial Planning and Housing. Stakeholders: Municipalities
Geographical range	Regional.
Gender and inclusion perspective	Udalsarea 2030 network promotes gender inclusion and a gender perspective in all its Local Action plans. Inclusion in terms of age and background is also promoted as a cross-cutting element in all the activities.
Lessons learned / Obstacles	Lessons learned:  - The capacity of municipalities to mobilise in order to adopt local sustainability policies and adapt local policies to international strategies such as the 2030 Agenda.  - The capacity of the network to generate tools and projects that can be adapted to all types of municipalities (urban, rural,)  - The commitment of municipalities to promote a model of governance based on participation, transversality, accountability and communication  Obstacles:  - Difficulty to work in a coordinated way between all administrations to achieve an integral vision and a real transversality, considering that the network works mainly with the environmental areas of each administration.  - Lack of resources in small municipalities







#### Description and highlights of the case

Udalsarea 2030 is a network of municipalities created in 2002. Its main goal is the inter-institutional coordination and cooperation across different government levels to promote sustainability at a local level in the Basque Country. Action plans are currently being adapted to the Sustainable Development Strategy 2030.

This network presents a unique case of municipality collaboration, as the complex and singular institutional framework of the Basque Country provides regulatory competency and capacity to all government levels.

This network links 187 municipalities as well as other public institutions, such as the Department of the Environment, Territorial Planning and Housing and the Department of Health of the Basque Government, the Provincial Councils of Araba, Bizkaia and Gipuzkoa, the Basque Water Agency and the Basque Energy Entity.

New approaches to the diagnosis of the problem and the conceptualisation process

The network's 2020 strategic plan was developed in a participative way, through interviews, discussion groups and surveys. This initiative gathered together technical teams from different administrations, political leaders, and other public and private agents (universities, clusters, similar networks). The plan also has its own participatory evaluation system that includes a specific technical committee <sup>21</sup>.

New co-creation and prototyping capabilities in five interconnected levels

The network works in small thematic groups on areas of common interest for the municipalities. The methodologies and knowledge acquired in these groups are shared with the rest of the municipalities through workshops.

A clear example of the collaboration between the co-creation spaces within the network is the work carried out to include a gender perspective in all the Action Plans. This initiative started in 2009 by a working group of municipalities, in close partnership with their urbanism, environment and gender equality departments. The methodology designed was included in a public report 22 and shared with the rest of the municipalities through workshops. This initiative led to some pilot projects (symbolic representation maps, analysis of women's representation in citizen participation forums, updates in local action plans to adapt them to the gender perspective, etc.). This work has been supported by grants <sup>23</sup> from the Department of Environment to local councils that incorporate gender perspectives in municipal planning and urbanism actions (2017-2018). Grants have been used to improve women's safety in public spaces, as well as including mobility plans made by men and women. Additionally, this funding has contributed to encouraging the participation of women in citizen participation processes and in technical teams executing urban plans.

Another example of co-creation is the online tool created and the pilot project implemented within the framework of the Urbanism and Health working group <sup>24</sup>. Apart from environmental and urban technicians from municipalities, heads of the Health Department of the Basque Government also took part in this process, in order to analyse the effect on local urban initiatives that involve modifications in the urban environment.

<sup>&</sup>lt;sup>24</sup> Practical guide for the analysis of the effect on health of local town planning initiatives: http://www.udalsarea21.net/Publicaciones/Ficha.aspx?ldMenu=e0d5d6ec-204e-418a-8102-e25f1ee09927&Cod=c7b41c06-c532-4925-a64b-06a248edcfc9&Idioma=es-ES&Tipo=







<sup>&</sup>lt;sup>21</sup> Strategic Plan and 2017-2018 Management Plan (Spanish): http://www.udalsarea21.net/Publicaciones/Ficha.aspx?ldMenu=892e375d-03bd-44a5-a281-f37a7cbf95dc&Cod=25d64d9f-dd4d-4119-aee9-d84ab050dec6&Idioma=es-ES

<sup>&</sup>lt;sup>22</sup> First steps for the integration of the gender perspective in the Local Agenda 21 processes (Spanish) http://www.udalsarea21.net/Publicaciones/ficha.aspx?ldMenu=892e375d-03bd-44a5-a281-f37a7cbf95dc&Cod=7b77df63-dd44-4149-8e55-f4241c9f54e3&ldioma=es-ES&Tipo=

<sup>&</sup>lt;sup>23</sup> Grants from the Department of the Environment, Territorial Planning and Housing to municipal plans that introduce safety criteria and equal access for women in their urban planning (Spanish): https://www.irekia.euskadi.eus/mobile/es/news/47461

The network also offers an annual programme (Berringurumena) for the prototyping of local innovation projects in four areas: climate change (mitigation and adaptation), natural heritage (nature-based solutions), circular economy and soil. These projects must be pioneering for the Basque Country and must be aligned with the Basque Declaration <sup>25</sup> (Basque Environmental Strategy for Sustainable Development/ Climate Change Strategy) and European strategies. The programme takes into account aspects such as public-private partnership agreements for their development, the involvement and commitment of all areas of the municipalities, the reduction of impacts, and citizen participation.

These are some of the 78 <sup>26</sup> projects carried out in nine editions:

Smartkalea: an initiative to promote responsible energy consumption in homes located in the centre of the old town of Donostia (Gipuzkoa), with special attention to homes that suffer from energy poverty, through an information campaign and the installation of smart metres. The reduction in CO<sub>2</sub> emissions was 0.823 tonnes per year.

Sustainable Urban Drain Systems (SUDS): In the municipality of Legazpi, a project was launched to implement a sustainable drainage system, lamination and water purification for the municipality.

Egoki Project 2: a project in which two Basque municipality members of Udalsarea 2030 participated to integrate climate change in municipal plans and address the integration of adaptation criteria with a bottom-up <sup>27</sup> approach.

#### New management approaches

The network governance system is specifically designed to manage the network, with an Executive Committee formed by political leaders (its main function is to approve the multi-annual Strategic Plan and Management Plans). Also involved is a Technical Committee made up of small working groups of technicians from different administrations, which facilitates the implementation of the Action Plans. A Technical Secretariat is in charge of implementing, coordinating and promoting the activity of the network.

Regarding evaluation, local action plans in different municipalities are evaluated using a specific indicator system created by the network <sup>28</sup>. There are more than 150 indicators divided into four main thematic areas, measuring environmental, social, economic and governance aspects. The last evaluation took place in 2017 because the network is currently adapting its activity to the 2030 Agenda for Sustainable Development.

Additionally, the evaluation system includes an online tool that provides information on the situation of municipalities and counties and helps to identify problems and make decisions.

To tackle climate change, the tools and methodologies developed by US 2030 (mitigation and adaptation) have been designed in a collaborative way, with the goal of being applied in all municipalities. The tool for calculating the GHG emissions of the municipality (first version dated 2015) and the pilots carried out in the municipalities of Tolosa and Donostia to improve resilience to climate change <sup>29</sup> are other tangible outputs of this approach.

<sup>&</sup>lt;sup>29</sup> How to improve resilience to climate change in the municipalities of the Basque Country. The case of Donostia/San Sebastián and Tolosa (Spanish) http://www.udalsarea21.net/Publicaciones/Ficha.







<sup>&</sup>lt;sup>25</sup> Basque Declaration: new pathways for European cities and towns (English) (http://www.sustainablecities.eu/endorse-the-basque-declaration/)

<sup>&</sup>lt;sup>26</sup> List of innovative projects (Spanish): http://www.udalsarea21.net/paginas/ficha.aspx?ldMenu=89C2888A-F578-4B01-A6B7-31E73974924D&ldioma=es-ES)

<sup>27</sup> Final Outcome Document - Egoki 2 (Spanish): https://www.navarra.es/NR/rdonlyres/FF823703-3708-42CE-86F3-879AF80D0ACD/451701/EG0Ki2\_MemoriaFinal\_Participacion\_parapublicar.pdf

<sup>&</sup>lt;sup>28</sup> Local sustainability indicators in the Basque Country, 2017(Spanish)

http://www.udalsarea21.net/Publicaciones/Ficha.aspx?ldMenu=892e375d-03bd-44a5-a281-f37a7cbf95dc&Cod=64d398ef-ab0d-4ce4-9b98-ef4f08c74538&ldioma=es-ES-2000-background-2000-b

CASE STUDY 3: CITY OF BOLOGNA	
Brief summary of the initiative/ project	This case demonstrates the implementation of spaces for local policymakers to connect with citizens and inhabitants of different neighbourhoods on a regular basis. The city council also created a new organisation, an innovation foundation (lab) to take on a novel 'facilitator' role for projects following a human-centred design approach
Core key dimension of governance and policy innovation	<ul> <li>New co-creation and prototyping capabilities         in five interconnected levels</li> <li>New management approaches</li> <li>Transformative Capital</li> </ul>
Promoter(s) (challenge owner) & Stakeholders	Municipality of Bologna Fondazione Innovazione Urbana
Geographical range	Local.
Gender and inclusion perspective	No information available.
Lessons learned / Obstacles	The lack of confidence that certain groups had in public interventions obliged the public authority to change the approach dependent on the district, adapting their language and tools.







#### Description and highlights of the case

The City of Bologna, in 2014, passed a regulation to streamline civic engagement, allowing citizens and private organisations to sign collaboration pacts with the city in order to improve public space.

They also created an intermediary institution with a remit to implement specific actions from the Mayor and the six labs from the districts that were innovating and collaborating with citizens <sup>30</sup>.

#### New Management Approaches

In 2018, the city council, in partnership with the University of Bologna, created the Fondazione Innovazione Urbana (FIU - Urban Innovation Foundation). This new institution is a continuation of Comitato Urban Center Bologna (Bologna's Urban Center Committee), with 15 years of experience in the communication of urban transformation and civic participation. The FIU is a legal entity with its own budget, and the President of the Foundation is chosen by the Mayor (See Figure 5).

The FIU works to realise city government projects, and mediates between the city council and the community through a "proximity approach", which they describe as being a "bridge between citizens and the Mayor" <sup>31</sup>.

The Office for Civic Imagination (OCI) is a department of FIU, formed by a multi-disciplinary team (architects, urbanists, communicators, science policy experts, sociologists, data experts, etc.) with the aim of managing and implementing the participatory approach in Bologna.

Since 2017, the OCI has created policy labs in geographical or thematic areas, depending on the objectives of City Hall. Citizen engagement has become embedded, and in each neighbourhood there is a year-round policy lab which holds conversations about public resources, needs and opportunities. In these labs they use different engagement methods, including digital tools (e.g. an app to vote), focus groups or individual interviews.

The OCI team is distributed territorially, in six District Labs. Each lab has a person responsible for maintaining community relationships, and holds meetings roughly once a month to listen to the community's needs or to discuss the participatory budgeting process. This person plays a key role in the community, spending at least half the month there, and demonstrates the "proximity approach". His or her focus is on understanding the context and needs of the citizens – particularly using simple tools and aiming to reach those who are excluded from government and policy dialogues.

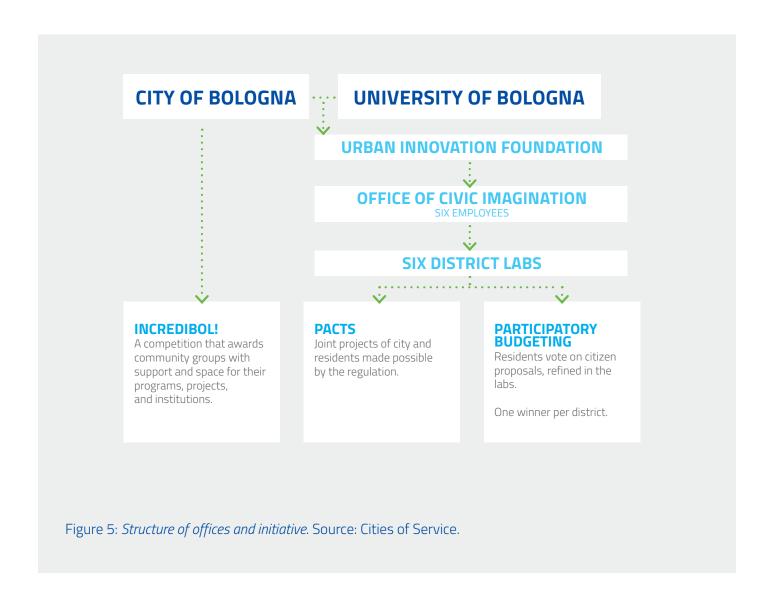






<sup>30</sup> Cities of Service, Co-Creating Urban Commons: 2018 Engaged Cities Cities Award Case Study, accessed July 5, 2019, https://citiesofservice.org/resource/co-creating-urban-commons-bologna-italy/.

<sup>31</sup> Interview with Michele D'Alena, Head of FIU's Office of Civic Imagination.



Specific climate change initiatives include *Laboratorio Aria*, a collaboration between the Municipality of Bologna, the University of Bologna, Arpae Emilia-Romagna, Ausl Bologna and the Metropolitan City of Bologna, and coordinated by the FIU. The aim of the lab is to increase awareness of air quality issues in the city by creating a constant flow of information.

The key objectives of the lab are to build a network of different stakeholders, at different levels (institutions, associations, committees, formal and informal communities) in order to increase citizens' awareness and engagement about air quality. Outputs include: defining strategies and tools for networking; disseminating and expanding air quality monitoring databas-







es institutionally and from the bottom-up; defining strategies, contents and shared tools to inform and communicate continuously and effectively on the issue of air quality; and identifying individual behaviours that can help to address the problem <sup>32</sup>.

### New co-creation and prototyping capabilities in five interconnected levels

In 2014, the city council passed the "regulation on public collaboration between citizens and the city for the care and regeneration of urban commons", this mechanism enables more participation and engagement by the people of Bologna. According to the regulation, participation "...with active citizens can lead to different ways of intervening on public spaces and buildings. In particular, engaged citizens will start to take ownership for the care of their neighbourhoods, sharing in the management of public spaces and regenerating their communities" <sup>33</sup>.

Proposed collaborations (pacts) are received by the Active Citizenship Office. This office is part of City Hall and has a staff of 12. The process of evaluating and implementing proposals includes people from all departments in City Hall.

The implementation of a project is done by private organisations, a person or an informal group. Once the city signs on to a collaboration pact, it acts as a partner in the endeavour, providing support throughout implementation. The city also conducts political evaluations to see how every proposal fits with other projects the city is planning.

#### Transformative Capital

The Collaboration Pact's mechanism allows for an alternative source of funding for the maintenance and regeneration of buildings owned by the city. The Collaboration Pacts' regulations created a shared management of the assets for a maximum of nine years, allocating limited funds and facilitating self-funding activities by citizens.



<sup>33</sup> Regulation on the collaboration among citizens and administration for the area and regeneration of urban commons http://labgovcity.designforcommons.org/wp-content/uploads/sites/19/bolognaregulation.pdf







<sup>32</sup> http://www.fondazioneinnovazioneurbana.it/laboratorioaria/

CASE STUDY 4: MIND MILAN INNOVATION DISTRICT	
Brief summary of the initiative/ project	This case shows an ecosystem formed by a diversity of stakeholders - research institutions, public administration, universities, start-ups, corporations and the financial sector - fostering innovation to develop an innovation district.
Core key dimension of governance and policy innovation	New portfolio approach New management approaches
Promoter(s) (challenge owner) & Stakeholders	Arexpo (publicly owned company). Lendlease (developer specialised in urban regeneration and infrastructure projects). Other stakeholders: University Statale of Milan, the Human Technopole and the Galeazzi Hospital (referenced in the project as "public anchors"). Fondazione Triulza.
Geographical range	Local.
Gender and inclusion perspective	No information available.
Lessons learned / Obstacles	The main challenge was around aligning the priorities and practicalities of public and private sectors actors, as well as reconciling the business model of a real estate project with the dynamics of an innovation district







#### Description and highlights of the case

MIND is a project to develop a city district in Milan whose ecosystem fosters collaborative innovation and experimentation between research institutions, public administration, universities, start-ups, corporations and the financial sector based in the territory (district) occupied by the Universal Exposition, hosted by Milan in 2015.

The project is a public-private partnership, and its aim is to become a space where different organisations and people connect in order to experiment with new solutions for urban living. For example, experiments include only allowing public transportation inside the area, zero CO<sub>2</sub> emissions and localised energy production.

#### New management approaches

The owner of the area (Arexpo), the land developer (Lendlease) and key community institutions (the Galleazzi Hospital, Human Tecnopole and University of Milan) make up the partnership.

Arexpo is a publicly owned company whose shareholders are the Ministry of Economy and Finance, Lombardy Region, Municipality of Milan, Milan Fair Foundation, Città Metropolitana de Milan and the Municipality of Rho. The company is strategically formed at three different levels of government (national, regional and municipal), guaranteeing access to different decision–making levels and therefore minimising jurisdictional and administrative barriers.

Lendlease, is an Australian real-estate developer who signed the concession contract with Arexpo, and will be the developer and manager of MIND for 99 years. The concession includes an obligation for Lendlease to invest in urbanisation infrastructure, building construction, and to pay an annual fee (i.e. rent) to Arexpo.

Finally, the key community institutions involved naturally bring together diverse segments of the community.

The project's governance includes different levels of participation and responsibility. MIND established a "federated innovation ecosystem", formed by different groups of stakeholders to oversee and coordinate innovation and experimentation activities. These stakeholder groups include:

- Strategic Alliance or Strategic Committee: addresses the management of the innovation district and is formed by one representative from Arexpo, Lendlease and the three key community institutions. Fondazione Triulza (local membership body for the social and not-for-profit sector) is also a member their inclusion is noteworthy since they are a network of civic society organisations working on centring social and environmental issues within the development of the area.
- International Advisory Council: comprised of global leaders and senior academics in the fields of technology, science, finance and economics.

Due to the complexity of the project, the partnership foresees the need for an intermediary institution to provide "ecosystem support". This is expected to be delivered by a third party, with the objective of coordinating the 100 companies MIND expects to attract.

The environmental sustainability aspect of MIND is based on several commitments, such as branding all of Leandlease's buildings with energy environmental ratings (e.g. LEED or others), no private cars inside the area, almost 70 hectares of green areas in different forms (urban farming, gardens, etc.), among others.

The operational framework highlighted the importance of co-designing and collaborating in order to mitigate against problems such as heat islands and flooding, which are two of the resilience indicators that Milan possesses at the city level. The necessity of modifying current regulations has also been identified. For example, in Milan, the re-use of waste in a circular economy could lead to double taxation. Barriers like this will need to be addressed, and MIND is in a good position to be able to do so due to its ability to influence at multiple levels of government.







#### New portfolio approach

MIND aims to connect different types of initiatives. An example of one of these is Programa 2121, which is administered by the Ministry of Justice in Bollate Prison (located near the district). The programme has a strong component of education and training for inmates, giving them the opportunity to do a paid work and develop new skills. The objective is to improve their prospects when they are released from prison, thereby lowering the recidivism rate (which in Italy is about 80%), while also supporting them in giving back to society. Collaboration with this programme enables MIND to work more closely with and contribute to the local community.

According to one of the interviewees, implementing this programme was a challenge because of the legal barriers involved. Additionally, navigating the different bureaucracies within the Department of Labour and Department of Justice was difficult, and required liaising with different levels of government and different political parties. This programme is seen as a proof of the need to work collaboratively and in different areas in order to holistically develop the entire district.



CASE STUDY 5: GREENING OF PARIS	
Brief summary of the initiative/ project	This case shows the strategic, multilevel governance, and political soft-leadership dimensions of the transformation of a city actively engaged in promoting the fight against climate change both within the city and at an international level.
Core key dimension of governance and policy innovation	<ul> <li>New management approaches</li> <li>Transformative Capital</li> </ul>
Promoter(s) (challenge owner) & Stakeholders	Promoter: City of Paris Stakeholders: other levels of Government, international organisations, private sector, citizens and civil society organisations.
Geographical range	Local but also an important international dimension
Gender and inclusion perspective	No information available.
Lessons learned / Obstacles	Lessons learned:  - Importance of a comprehensive and collaborative approach that anchors policy efforts in a wider vision.  - Demonstrates the ability of cities to exercise leadership at both local and international level, and the potential to leverage that combined approach to tackle climate change.  - Shows that an innovative approach to financing, and the identification of potential value and measures that have a clear impact on citizens' lives can enable synergies and build the necessary support of any deep transformation.  Obstacles:  - Difficulties in balancing the international dimension with the need to stay focussed on the local dimension.







#### Description and highlights of the case

The greening of Paris is an interesting example due to its holistic approach to climate policy challenges, as one conscious effort to transform the city. In particular, the case has important lessons with regards to the following core policy dimensions:

#### New Management Approaches

Paris's commitment to fighting climate change is part of a comprehensive and long-term commitment, which can be traced back to at least 2005, when the city council drafted the city's first Climate Action Plan. The Climate Plan has a monitoring committee - the Paris Climate Agency -, a multi-stakeholder partnership of public and private organisations. The plan was updated in 2012 and in 2017. The plan aims to turn Paris into a zero-emissions city by 2050. To complement the plan, the city has produced a series of dossiers with exhaustive analysis and long-term objectives and visions for the city. These include Paris: smart and sustainable, Paris Resilience Strategy, and Paris, an air of change: towards carbon neutrality in 2050 among others. Whilst this longterm policy planning in itself may not be deeply innovative, it is the comprehensive and collaborative approach that has increasingly incorporated citizens' voices to its drafting<sup>34</sup> which has now been replicated in several cities across Europe, and can provide valuable lessons for other cities willing to deploy similar strategic approaches to fighting climate change.

This longer-term multi-stakeholder planning exercise is a combined vision of a radical urban transformation, based on large-scale experimentation to achieve long-lasting change through the promotion of ecological urbanism, renewable energies, clean transport, and the circular economy.

One of the particularly interesting aspects of Paris's leadership approach is its twofold-approach to advancing the climate agenda through a combination of actions at the local and the international level. This is particularly important for cities looking to tackle climate change, as cities share the need and ability to act, but are often constrained by laws and institutional limitations that are decided at national or international levels. At those levels of government, other organised interests or different politics may influence the decisions over policies and regulations that affect citizens locally. Paris has joined other cities in bringing the interest of the citizens it represents to multiple international fora. For example, Paris's Mayor, Anne Hidalgo, has headed the C-40, one of the most important alliances of cities fighting climate change (where she has also spearheaded the Women4Climate initiative to help support and celebrate women leaders who are driving forward climate action), and in 2015 Paris organised the most important international climate summit for climate since the Kyoto Protocol, reaffirming the city's commitments to the cause and its ambitions to become the global capital of environmental action.

Paris has gone even further, and together with Madrid and Brussels, made an unprecedented move to sue the European Commission before the European Court of Justice for its decision over diesel regulations. It was the first time a Mayor used this legal instrument to try to influence a legal framework that is decided at another governance level. In December of 2018, the Court ruled against the European Commission.

This all makes Paris a clear and probably unprecedented example of the use of soft leadership and multilevel governance strategies to tackle climate change.

<sup>&</sup>lt;sup>34</sup> For example, through the use of citizens' assemblies.







#### **Transformative Capital**

Another characteristic and innovative feature of Paris's policy efforts is its innovative financing mechanisms. The Paris Green Fund is a 200-million-dollar territorial investment fund created by the Paris city council and independently managed by a private venture capital investment fund that finances small and medium innovative companies that provide solutions for the environmental transition of the city.

The city has similarly found creative ways to identify the value of its assets without necessarily increasing public investment in infrastructure. An innovative way to do this has been the process to unearth the hidden value of public assets through citizen engagement: *Reinventing Paris* is an initiative to envision and develop innovative urban projects that unleash the unrealised potential of the city's assets. It invites multidisciplinary teams to submit proposals "to revive sites of outstanding significance" and create more public value from existing resources. The second edition particularly addressed the problem of land scarcity by calling for initiatives to exploit the underground facilities of the city, such as old disused metro stations, parking lots or basements.







# Conclusions and reflections

This report presents a scan of the academic and practitioner experiences with policy and governance innovation, particularly with regards to tackling climate change in Southern Europe. This emerging field has no shortage of examples and terms, but there is a lack of conceptualisation. The analysis of the academic and practitioner experiences conducted by the research team resulted in such conceptualisation, which is presented along with a definition of the main dimensions that are part of it.

An important consideration coming out of the research is that, while innovations were not always originated in government structures, it is nearly impossible for them to succeed without the government's active involvement. This involvement can come in many forms: from new international roles, to the creation of new 'intermediary' organisations or the participation in large scale multi-stakeholder partnerships.

Another finding of the research is the wide-reaching consensus among practitioners and academics alike on the need to go beyond purely technological solutions if the aim is to deliver the changes that are needed to tackle climate change. Governments have a central role to play in that endeavour through the re-focussing of their capacities and structures.

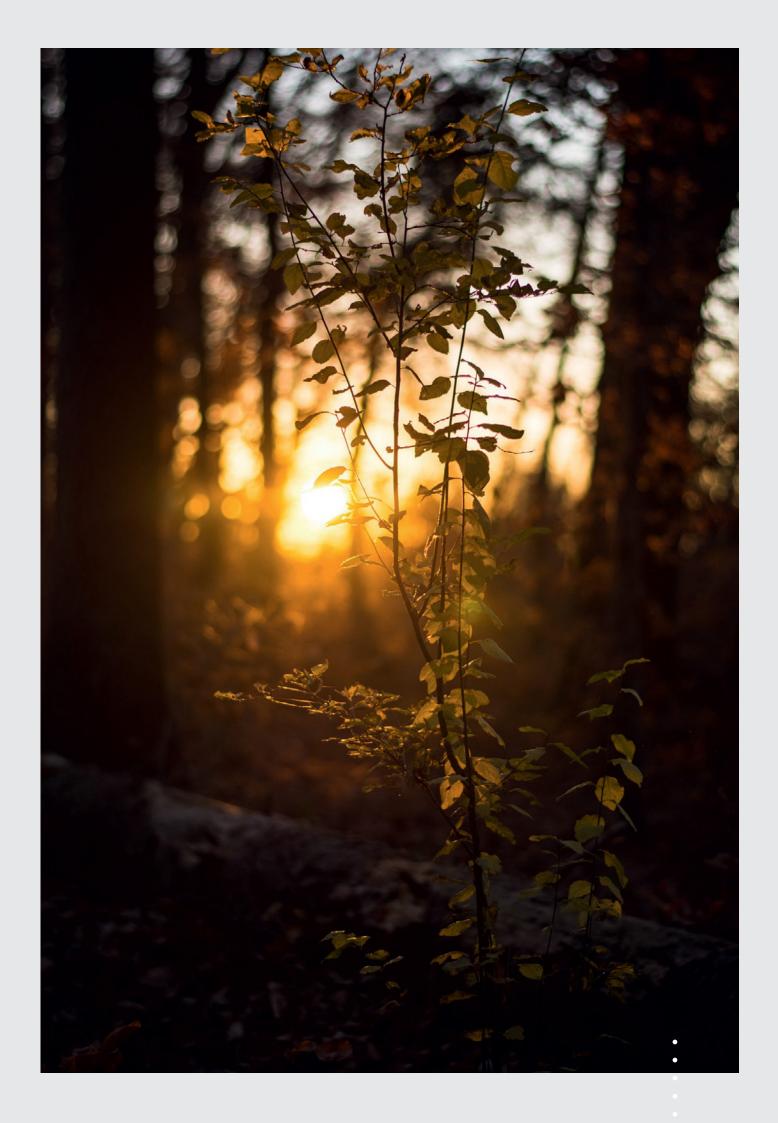
As a result of the above, the concept of policy and governance innovation delineated in the report includes a focus not only into improving services, processes and products, but on changing the institutions, norms, beliefs and values underpinning the governance structures, provoking a profound transformation. That change could be triggered by exploring and implementing the wide range of tools and mechanisms clustered into the five key dimensions outlined in the report: diagnosing the problem and defining the process, prototyping capabilities in five interconnected levels, developing a portfolio approach, introducing new management approaches and deploying transformative forms of capital.

We hope that the framework laid out in this report, as well as the examples of its implementation in a set of interesting examples in Southern Europe, will inspire and give courage to innovators who are working hard every day to bring the changes we need to fight climate change from within and around government.









# Appendix 1 - List of references on public sector innovation in Spain and Portugal

Innovación Pública Abierta: ideas, herramientas y valores para participar en la mejora de la administración. Novagob.lab

Laboratorios de Innovación para cambiar la gestión pública: análisis del caso de Novagob. Rojas Martín, F. Criado, I. Silván, A. Revista de Gestión Pública. Volumen IV, número 1. Enero - junio 2017

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La necesaria innovación en las instituciones administrativas: organización, procedimiento, función pública, contratos administrativos y regulación. Rivera Ortega, R. Madrid, Instituto Nacional de Administración Pública (INAP), 2012.

Plan Estratégico de Gobernanza e Innovación Pública 2020. Gobierno Vasco, 2017.

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Governação de Organizações Públicas em Portugal: A emergência de modelos diferenciados. Carlos Rodrigues, 2011.

La innovación de la administración pública en el siglo XXI. Ainara Osoro Txurruka. Universidad del País Vasco y Université Bordeaux Montaigne

Innovación Pública: un modelo de aportación de valor. Sánchez, C., Lasagna, M., Marcet, X., 2013

La Participación Pública y la Innovación Social en la Elaboración de Políticas Públicas. María Asensio. Instituto Nacional de Administração, 2011.







### Appendix 2 -Case studies additional information

#### **Tropa Verde in Galician Municipalities**

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https://www.lavozdegalicia.es/noticia/santiago/2019/03/02/span-langglimplicamos-mais-3300-persoas-150-empresas-na-reciclaxe-residuos-spanformacion-europa/0003\_201903S2C12994.htm

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http://santiagodecompostela.gal/hoxe/nova.php?id\_nova=18559&lg=cas

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https://www.youtube.com/watch?v=r4i84\_oPTWo

#### Udalsarea 2030 network

www.udalsarea2030.eus

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Basque Declaration: new pathways for European cities and towns (http://www.udalsarea21.net/Publicaciones/ficha.aspx?ldMenu=892e375d-03bd-44a5-a281-f37a7cbf95dc&Cod=845570c6-e077-464f-b24a-735e35b881ea&Idioma=en-GB&Tipo=)







#### City of Bologna

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#### **MIND Milan Innovation District**

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https://www.fondazionetriulza.org/it/page/cascina-triulza-lab-hub-per-linnovazione-sociale/1171/

https://www.mindmilano.it/fondazione-triulza/

https://www.mindmilano.it/en/mindlab/







#### **Greening of Paris**

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http://www.reinventer.paris/en/

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