Inception Report

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Flash flooding across Europe and China. Forest fires in North America, Turkey, Greece, and Ukraine. The summer of 2021 exposed our growing climatic uncertainty as heat and rain records continue to be broken on a regular basis. As the latest Intergovernmental Panel on Climate Change (IPCC) statement reaffirms with high confidence, there is a near-linear relationship between cumulative anthropogenic CO_2 emissions and the global warming they cause (IPCC, 2021). Meanwhile, the natural world has underlined humanity's vulnerability in the form of COVID-19, a global pandemic that has taken the lives of over 1 million Europeans (Statista, n.d.) and affected those of many more.

Introduction

Flash flooding across Europe and China. Forest fires in North America, Turkey, Greece, and Ukraine. The summer of 2021 exposed our growing climatic uncertainty as heat and rain records continue to be broken on a regular basis. As the latest Intergovernmental Panel on Climate Change (IPCC) statement reaffirms with high confidence, there is a near-linear relationship between cumulative anthropogenic CO_2 emissions and the global warming they cause (IPCC, 2021). Meanwhile, the natural world has underlined humanity's vulnerability in the form of COVID-19, a global pandemic that has taken the lives of over 1 million Europeans (Statista, n.d.) and affected those of many more.

Although development towards more sustainable societies has been at the heart of global and European policies for decades now, time is clearly running out. Ambitions to make Europe the first climate neutral block in the world by 2050 reflect this urgency, in line with the European commitments in the Paris Agreement on Climate, the

European Green Deal, the United Nations (UN) Sustainable Development Goals, and the Glasgow Climate Pact at the 26th Conference of the Parties.

The existential climate crisis requires deep systematic change: conventional approaches to gradually increase energy-efficiency will not suffice (EEA, 2019). Transitions that change the way we address climate challenges are necessary in industry sectors such as energy, manufacturing, and agriculture, but there are also wider implications for the whole of society. The transitions ahead may be disruptive and costly for some social groups already at risk, leading to unemployment, poverty, and exclusion, while reinforcing the dualisation of society. It is therefore crucial to make these transitions also just. Ensuring "Just transitions for all" means promoting natural resources protection and drastically decreasing pollution-levels whilst supporting equal quality of life for all.

As the economic, cultural, and social centres of Europe, where most people live, cities are particularly vulnerable to the impacts of climate change. At the same time, cities consume 78% of the world's energy and generate more than 60% of greenhouse gas emissions (UN Habitat, n.d.) making them also drivers of the climate emergency. Consequently, cities occupy a unique position and must act as important agents for Just Transitions to a carbon neutral society to achieve their own and Europe's targets.

The question is **how** can urban authorities facilitate making the transitions just so that no one is left behind? This will require innovative technical and governance approaches going beyond business as usual by doing things in a different way. Cities need support to develop and implement such solutions.

Under Cohesion Policy, article 7 and 9 cities already focus on Integrated and Sustainable Urban Development (SUD), which provides a framework for cities to tackle these challenges. Alongside this, the Urban Innovative Actions (UIA) Initiative, has already supported 86 city projects testing innovative solutions to urban challenges. Many of these contribute to and support Just Transitions. The UIA multi-stakeholder approach has facilitated innovative stakeholder collaboration within the projects, involving (amongst others) grass-roots activists, urban policy makers, practitioners, and technical experts. Developing new approaches to public procurement, nurturing new green sectors and developing monitoring frameworks have been amongst the new roles tested by UIA-funded cities. Showcasing these and upscaling the lessons learned will enable other cities to apply them, increasing the prospect of Just Transitions across Europe.

This document frames the approach to the UIA knowledge work focused on Just Transitions structured as follows:

- "Just Transitions" in European cities
- UIA cities at the forefront of Just Transitions
- Approach to analysing the UIA projects dealing with three challenges: the green renewal of the job market, cities' affordability and accessibility and the democratic transition at local level.

1. "Just Transitions" in European cities

1.1. The need for transitions to climate neutrality and the related social challenges

The EU policy level recognises the existential threat that climate change and environmental degradation pose to Europe. It also acknowledges the insufficiency of conventional technological and governance approaches and the need for innovation. As such, the European Green Deal seeks to address these in transforming the EU into a modern, resource-efficient and competitive economy, ensuring that net emissions of greenhouse gases are achieved by 2050, where economic growth is decoupled from resource use and no person and no place is left behind (European Commission, n.d.). In particular: "... these transitions must be just and inclusive... The most vulnerable (people) are the most exposed to the harmful effects of climate change and environmental degradation. At the same time, managing the transitions will lead to significant structural changes in business models, skill requirements and relative prices. Citizens, depending on their social and geographic circumstances, will be affected in different ways" (European Commission, 2019).

Indeed, the social and environmental justice consideration in the overall societal transitions have been a key concern for many researchers and policy-makers for decades: The large-scale and transformational climate change mitigation measures required for moving to a climate neutral society will also trigger significant changes in the employment sector with an unequal distribution of benefits and costs under the current model of production and consumption (Rosemberg, 2010). At the end of the last century, coal mining trade unions in the United States and Canada were already concerned about workers' and communities' health and livelihood whilst preserving the natural environment (UNRISD, 2018). Subsequently, other organisations (i.e., United Nations Environment Programme (UNEP), International Labour Organization (ILO), United Nations Commission on Sustainable Development, and United Nations Framework Convention on Climate Change (UNFCCC)) have put Just Transitions on their agendas.

The discussions at the Conference of the Parties (COP) 15 in Copenhagen in 2009 revealed that "unless a job-friendly rationale was developed under climate change, there was the risk for this issue to be seen only under a gloom and doom perspective" (Rosemberg, 2010). The European Environment Agency stresses that the uneven distribution of the climate and environmental impacts closely reflects the socio-demographic differences within Europe (European Environment Agency, 2018). In particular, lower socio-economic groups can often not afford to live in healthier areas and lack the means to adapt to climate change impacts. Groups with lower incomes may also be more affected by energy poverty if prices for clean energy rise and there is little access to energy-efficient housing (Stevis et al., 2020).

Failure to address these risks will undermine the need for widespread societal support required if the transition to climate neutrality is to succeed. Awareness of this has strongly shaped the EU policy response.

In this study, Just Transitions will refer to the diverse and complementary approaches needed to achieve a fair, inclusive climate neutral and resilient economy, addressing at the same time environmental, social and economic issues.

1.2. EU support to Just Transitions

In addition to the Green Deal priorities and the European Climate Law writing its goals into law, the commitment to Just Transitions is consistent with existing priorities at EU level. Central to this is the EU's adherence to achieving the 17 UN Sustainable Development Goals (SDGs), the first of which is the eradication of global poverty. At stake, and most at risk, are those parts of Europe where the transitions will be most challenging, as well as the most vulnerable members of society across Europe, in precarious employment or most exposed to the impact of the Climate Emergency (Appendix 1). Ensuring that no one is left behind is also coterminous with the EU's ambitious target to lift 15 million European citizens out of poverty by 2030, as set out in the European Pillar of Social Rights.

At the heart of this is the danger of widening territorial and social polarisation across Europe. This strikes at the core of the EU project, particularly at its principles of cohesion and convergence, embodied in the Cohesion Policy, as well as in other programmes and support via the Recovery and Resilience Facility[1](RRF), the Just Transition Fund (JTF) which will support three targets: citizens most vulnerable to the transition; carbon-intensive business sectors and territories (Member States and regions) most dependent on fossil-fuels[2], and the Climate Action Social Fund (CASF) addressing the 'social and distributional challenges of Union's green transition' arising from the changes to emissions regulations in the housing and transport sectors, targeting citizens most at risk from the transition to climate neutrality like workers in coal mining and energy intensive industries or those with lower income and other challenges, limiting their access to clean energy and energy efficient housing and appliances. The "Fit for 55" Package also seeks to update existing laws and propose new ones for further actions to tackle climate change while committing emission trading revenues towards a climate action social fund to compensate the transition costs of vulnerable citizens.

Looking ahead, the way in which these various initiatives combine will be one of the acid tests of their success. Another will be their local implementation, and here cities have a central role to play. Their mobilisation within the EU Mission Climate neutral and Smart Cities and ongoing support for the Covenant of Mayors for Climate and Energy underline this.

[1] The RRF was established to mitigate the economic and social impact of the coronavirus pandemic

[2] It was established in response to those EU Member States who were reluctant to get behind the Green Deal, reflecting the ongoing political tension at its heart. Colli Francesca (March 2020) The EU's Just Transition: three challenges and how to overcome them. European Policy Brief, Egmont Institute

1.3. Cities' central role to facilitate and ensure Just Transitions

The public sector – and so local authorities - still needs to tackle the underlying forces that would undermine a transition. While there is an agreement on transformation, the questions towards what remains (Vincent, 2020). Profoundly rethinking the EU policy framework at all levels calls for new solutions that reconcile ecological transition and social justice. The complex climate crisis alongside shocks like the COVID pandemic demand increased co-responsibility and collaboration with citizens, companies, associations and the gearing of public action towards the idea of a socio-ecological pact (Vincent, 2020).

Cities in particular can be key players in this as they combine high concentrations of vulnerabilities with the potential to implement radical local experiments that can be tested, upscaled and improved, therefore

contributing to effective socio-ecological transitions. They operate as a place for innovation, co-creation and participatory citizen-led actions, using technology and space (European Commission-Joint Research, n.d.). As the New Leipzig Charter underlines, cities can act as "laboratories for new forms of problem-solving and test beds for social innovation". "The Glasgow Climate Pact at the COP26 significantly ramps up the call for greater action and financing for adaptation. Sustainable adaptation of cities was pinned as key to the acceleration of climate action and as essential for the resilience of our communities" (Yoksoulian, 2021).

Acting sustainably in cities will enable all citizens to "live a decent quality of life, and form part of the city's productive dynamic, creating shared prosperity and social stability without harming the environment" (2030 Agenda for Sustainability, SDG 11). Cities are where policy concepts like the SDGs and the Green Deal local are operationalised whilst the Urban Agenda partnerships continue to play a key role. In addition, cities provide governance models at local level whilst more than 10,000 European signatories of the Covenant of Mayors and Climate Chance strongly commit themselves to such environmental commitments.

The European model for sustainable urban development strategies provides the relevant framework for this, with its emphasis on integrated and participative approaches. Mechanisms like the Urban Development Network support this, and cities have indeed already proven to be key players for sustainable transition and the fight against climate change (Bonneau, 2021; European Environmental Agency, 2021), as well as for social inclusion, just and fairer societies (Eurocities, 2020). The on-going pandemic has also demonstrated the practical way cities can contribute altogether to a more just, green and healthy future (UN Habitat, 2021).

Given the new Cohesion Policy objectives, cities clearly have a central role, for example under Poliocy Objective 1 (Smarter Europe) and Policy Objective 2 (Greener Europe). As the form of government closest to the people, they are also essential to the EU's Policy Objective 5 commitment to bring Europe closer to its citizens. This red thread runs through the Green Deal, placing cities centre stage in relation to the continent's aspirations for Just Transitions. Furthermore, in support of the EU Green Deal, the project NetZeroCities has been recently launched to implement EU's Mission Climate-Neutral and Smart Cities of the Horizon Europe programme.

1.4. Approaches to implementing Just Transitions

Provided the enormous challenges that climate change poses to our deeply rooted economic and social system, a systemic approach to tackle them is necessary (EEA, 2019). In this regard, only a transformative approach to Just Transitions appears to be the most appropriate response from an overarching perspective. This would require wide-ranging change to the existing economic and political system and the offer of alternative development pathways (UNRISD, 2018) going beyond just compensation or managerial reforms Developing such strategies also requires recognising and tackling the many different types of justice or injustice.

The Urban Arena project, coordinated by ICLEI, identifies ten drivers of injustice that need to be tackled through transformative approaches to Just Transitions, the main one being the *unquestioned neoliberal* growth which may further fuel the climate crisis. Others are related to the *uneven environmental health and pollution patterns* and *exclusive access to the benefits of sustainability infrastructure* which relates to energy and transport poverty. *Material and livelihood inequalities, uneven and excluding urban intensification and regeneration* and *racialized or ethnically exclusionary urbanization* reduce the ability of certain vulnerable groups to participate in and benefit from the transitions. *Limited citizen participation in Urban Planning*, the lack of effective knowledge brokerage and stewardship opportunities, unfit institutional structures, and weak(ened) civil society are also considered injustice drivers as they hamper Just Transitions across citizen groups (Kotsila et al., 2020).

Those factors will affect people and territories in different ways, hence the call for cities to develop new approaches and concepts to rethink urban policies. Concretely, cities are testing different operational models to potential solutions. For example, the Doughnut Economy model frames our current economic position between an ecological ceiling and a social foundation. This supports cities to design adequate policy frameworks to reach the safe and just space between the two. The starting assumption is that we are currently outside the circle in different categories of the environment and the social foundation (Figure 1) (Doughnut Economics Action Lab, n.d.; URBACT, n.d.).

Figure 1: The Doughnut of social and planetary boundaries. Source: (Doughnut Economics Action Lab, n.d.)

Several cities have used this model to design policy and societal frameworks for actions towards Just Transitions. In Amsterdam for example a gathering of stakeholders, the Amsterdam Donut Coalitie, has identified four fundamental questions to help the city move to the circle of the doughnut model (see figure 2 below).
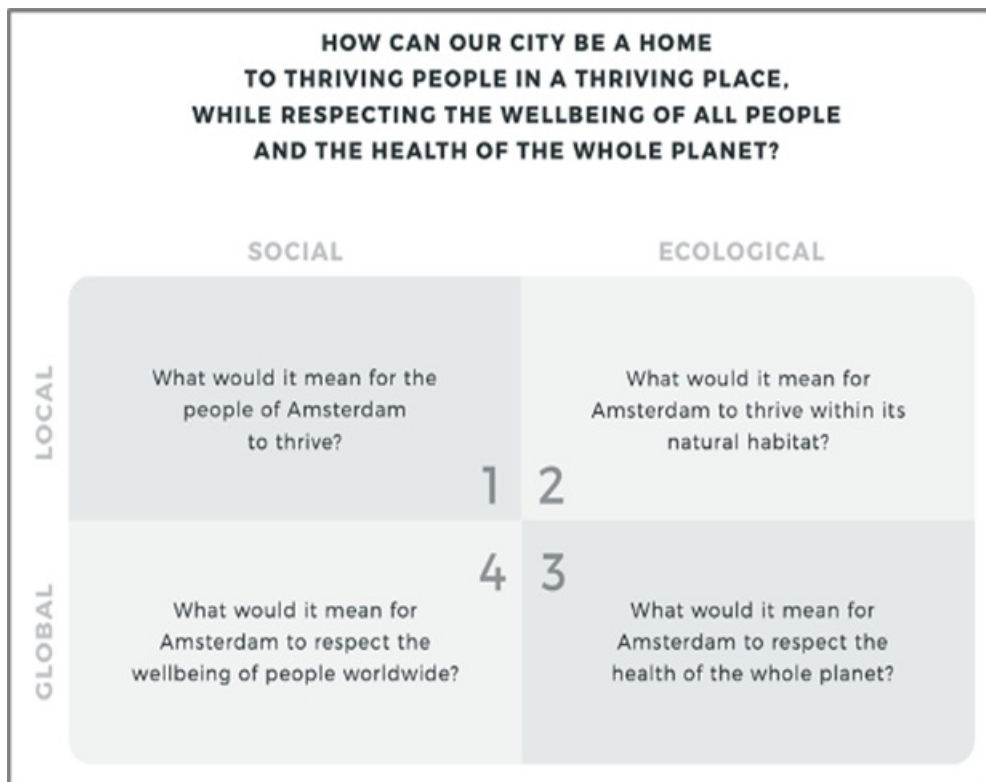

Figure 2: Four fundamental questions can cities help to move to the circle of the doughnut model. (Doughnut Economics Action Lab, n.d.)

The 15-minute city concept, developed by French-Colombian urbanist Carlos Moreno, has also gained traction, especially through the pandemic period. This repurposes urban social functions, with the aim of dramatically reducing the need for intra-city travel. This is a transformative way to deal with mitigating emissions from the

transport sector by changing mobility behaviours as well as trying make current transport means cleaner. Under the concept of "La Ville Du Quart d'Heure", Paris is reviewing its concept of local services, Nantes, Mulhouse and others are considering this time-oriented paradigm as part of their urban plans.

1.5. Addressing Just transitions in cities: key Research questions

This study takes a wide perspective on Just Transitions relating to places and people. The starting point is that the territorial impact will be universal, although those localities with a high dependence on fossil-related energy will be most affected. Beyond workers in coal mining and other high-risk sectors, other citizen groups are vulnerable. These include dependent families and people in dependent service jobs. More widely, it comprises those who are low skilled, low income and less mobile as well as those struggling to access new services, energy-efficient housing and clean mobility. Often the same people face barriers participating in transition processes (for a broader overview see Appendix 1).

Often, interventions at city level address a specific aspect of the challenge, rather than adopting the holistic approach that is required. This UIA research will adopt a multi-lateral approach, identifying innovative solutions that are scalable to facilitate Just Transitions.

Within the scope of this work, three challenges related to the implementation of Just Transitions for cities stand out: the evolution of a green skills and labour market; transitions affordable for all; and the renewal of governance and participative structures. In relation to this, the 86 UIA projects within the 14 topics of the Urban Agenda offer a diversity of practical approaches to Just Transitions which will be considered in this analysis.

The focus will be on how urban authorities can facilitate Just Transitions so that no one is left behind, under one main Research question: "What are the main implementation lessons emerging from UIA cities in relation to Just Transitions?

The following three key sub-questions will be applied across each of the three themes:

1. What barriers do cities face and how are they addressing them?
2. What key lessons are emerging from this sub-theme for the carbon neutral future of cities?
3. What successful approaches can be replicated and scaled across Europe?

2. UIA cities at the forefront of Just Transitions

It has been noted that a business-as-usual approach will not be sufficient to achieve carbon neutrality by 2050: deep systemic changes and transformative actions are needed (EEA, 2019). While these transformations concern all parts of society, three specific areas have been selected for analysing approaches, tools and good practices developed and used in UIA projects and other relevant city strategies that can support the work of urban practitioners and managing authorities of mainstream programmes in implementing Just Transitions (figure 3).

First of all, new skills, jobs and businesses are required for the **job market green renewal** as the way energy is produced and consumed (alongside the digital revolution) will massively change it. Acquiring new skills and creating new jobs will allow people to benefit from the climate neutral future. Secondly, making the transition just asks for broad stakeholder participation and co-creation. The (economic) empowerment of low-income and vulnerable stakeholders to participate in the shaping process will help **make the transitions affordable for all**, whilst being inclusive for all stakeholders calls for new forms of participatory governance - enabling a **democratic transitions for all**, the third focal point.

This approach primarily draws upon UIA examples but will include strong cases from beyond the Initiative under each of the themes.
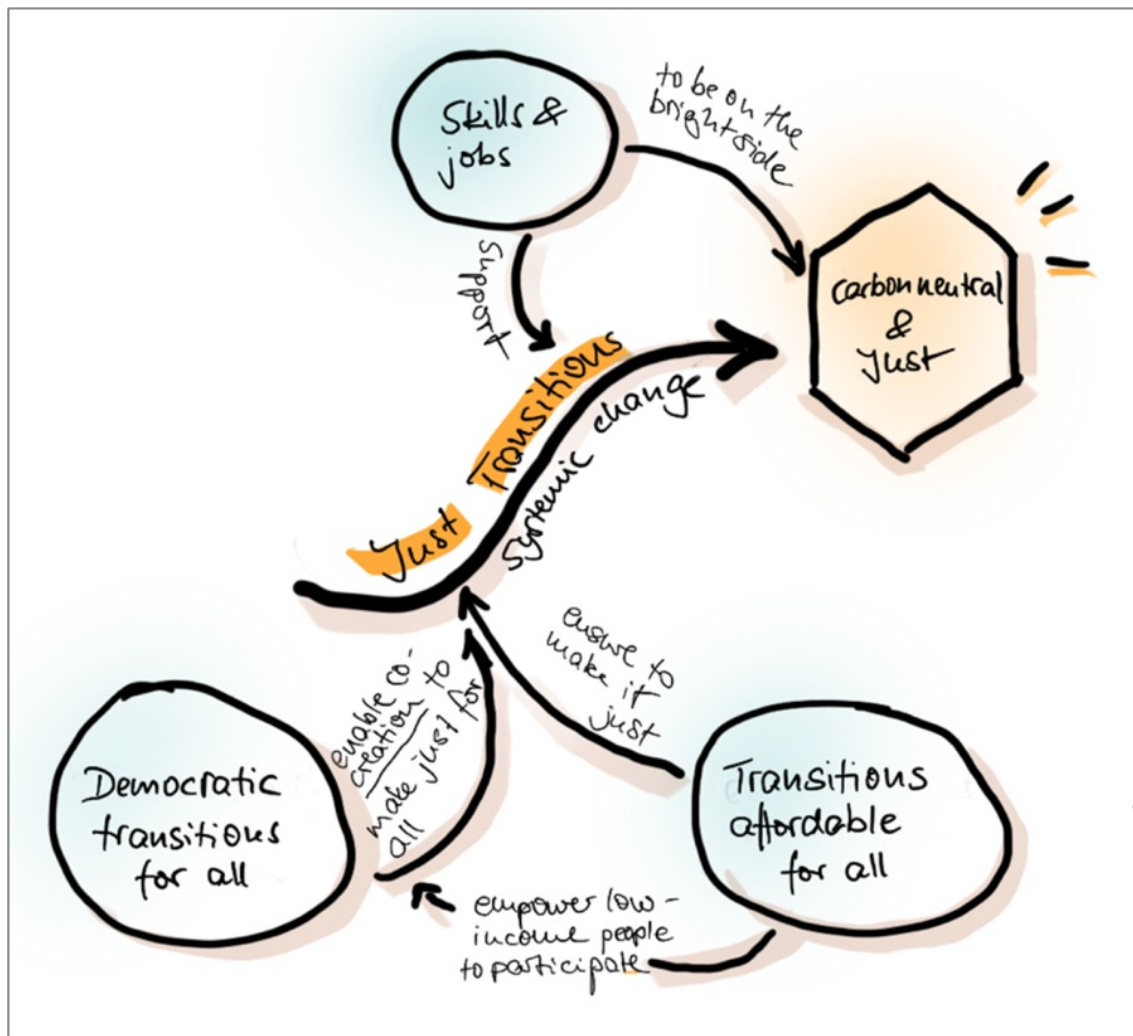
Figure 3: Interrelationships between the three challenges and with Just Transitions towards carbon neutrality

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2.1. The job market green renewal

Addressing the potential labour market impacts of the climate neutral transition is central to the European Green Deal. The protracted negotiations preceding its launch reflected both the complexity of the agreement, but also the long-standing tension between the EU's economic and environmental goals. However, as Anabella Rosemberg noted: "Job losses are not an automatic consequence of climate policies, but the consequence of a lack of investment, social policies and anticipation." (Rosemberg, 2010)

UIA cities are testing solutions to mitigate the impact of job losses and to support industry adaptation and the growth of new climate neutral industry sectors. The question of skills sits at the heart of their sustainable urban development strategies: what future skills will be required and how we can equip our citizens with them - both now and in the future?

No industry sector will remain unaffected by the transition to the Next Economy. Although some carbon dependent sectors will suffer particularly severe disruption, the shift will have universal impact. Effectively forecasting the jobs and skills implications of this is the crucial first step in being prepared, shining a light on occupations that will disappear as well as the new ones that will emerge. It will also shape our knowledge about the ways in which continuing jobs will need to adapt. Crucially, this will also expose those most vulnerable in the labour market and provide a basis for improving and sustaining their future employability. At its core, skills forecasting is about the provision of perspective, enabling cities to make informed strategic decisions.

Several UIA projects have conducted pioneering work in this respect. Amongst them are two Dutch cities (Eindhoven and Rotterdam) and a smaller Spanish city, Cuenca, in the niche area of urban forestry. Aveiro in Portugal has also been a pioneer around the growing importance of digital skills.

The approach will extend beyond UIA to examine effective city approaches such as Porto's establishment of a Talent Observatory (Adams, 2021) and Munich's pioneering approach to anticipating the skill needs of circularity in

the construction sector.

It is estimated that the transition may create as many as 2 million jobs (European Commission, 2021), many of those in new green industry sectors. This assignment will explore how cities are identifying and supporting this process, for example through their facilitation of industry-research collaboration, provision of space for business incubation and financial support for start-ups. In cities like Ostrava, we see the UIA project as part of a systemic shift away from a carbon-based ecosystem.

There are already a good number of UIA examples around new sector support. These include smaller cities like Viladecans (Spain) around housing and energy, Lappeerantra (Finland) concerning the circular economy and the Swedish city of Växjö, which is pioneering a new approach to procurement, to stimulate new green business responses to city challenges.

Implementing the Paris Agreement to reduce carbon levels is expected to lead to a 0.5% increase in employment across the EU (Lewney and et al., 2019). However, the transition will require workers with new skills as well as the refresh of existing ones. The scale and pace of change will require a step-change in our approach to skilling, with lifelong training becoming the norm.

Just Transitions will require paying special attention to the low skilled and those working in carbon reliant sectors. This study will examine the way cities are approaching these challenges. Additionally, it will be important to understand who is working alongside city authorities to make this happen. The financial options being utilised at city level will also be an important aspect of this research.

A number of UIA projects develop pertinent approaches to the questions of skilling. They include two smaller cities (Pozzuoli and Fuenlabrada) really grappling with the twin challenges of reducing carbon whilst reskilling the most disadvantaged citizens. Cluj-Napoca provides a related example in a project with a dual focus on the culture and creative industry sectors and reskilling Roma citizens. Aveiro, Eindhoven and Rotterdam, already mentioned around forecasting, also bring strong and relevant experience to this sub-theme.

2.2. Make the transition affordable for all

One of the main questions relating to sustainable transitions is "how to leave no one behind"? Indeed, rebound effects of decarbonising policies can be strong on socio-economic inequalities, preventing access to green technologies and services to vulnerable groups. Amongst others, installing new energy infrastructure requires long-term investment which might not be accessible to all in the short-term (G20, 2021). Also, improving living conditions (e.g. reducing traffic in a street, greening of public space, housing refurbishment, improving biodiversity level) can lead to long-term phenomena known as the luxury effect or gentrification processes that decrease high quality district's affordability, pushing vulnerable people towards less healthy areas (Beretta and Cucca, 2019; Grossmann, 2019). At the same time, developing new mobility infrastructures and opportunities for sustainable means of transport might on the one hand affect those who do not access them (because of their price) and on the other hand might prevent those using polluting means of transport - but who cannot afford to change (Grossmann, 2019).

It is also important to stress that the city is largely made and renovated for wealthy white men. Women, non-white people, infants and disabled people tend still not to benefit from many of the renovation projects traditionally being developed (UCLG, 2019). City services are being developed and made more sustainable in the light of smart strategies: yet such approaches might increase the digital divide (Shin et al., 2021). Last but not least, a range of new opportunities exists for making products available in the city more sustainable, for example in terms of urban agriculture and food. Yet, as these reflect the cost of actual production but not the environmental, economic, social and health benefits, they remain financially inaccessible to a wide range of populations (Verly-Jr et al., 2021).

In order to address these, **financing** green and innovative technologies has enabled their access to all/vulnerable groups (financial mechanisms and solutions that counterbalance the green solutions overcost). For example, amongst the UIA projects financial instruments and solutions can ensure all can access high quality and sustainable housing (e.g. ICARRUS, YesWeRent!, Eco-Housing) or sustainable energy (e.g. EPIU). Using combined social and environmental criteria in public procurement supports the wider transition of all (e.g. Mares).

In addition, providing **access** to green and innovative **services** and **technologies** can reach out to vulnerable groups. This can be done with the inclusion of vulnerable groups and marginalised people in local projects on nature-based solutions and/or regeneration projects (e.g. UPPER, SPIRE, A Place to Be-come), in the sustainable renovation of housing with social purposes (e.g. Curing the Limbo) or the sustainable regeneration for community benefits (e.g. OASIS). Developing (mixed) residential areas can also be combined with the reduction of emissions together with residents (e.g. Vilawatt, E-Co-Housing, Re/sourced, Resilio). Providing access to - sustainable and healthy - food can also improve social reinsertion and cohesion and combating foodwaste (e.g.

TAST'in FIVES, AU2Food). Making the city accessible and affordable to all can also happen with the design of new and softer transport modalities (e.g. SASMob).

2.3. Democratic transition for all

Given that the necessary systemic change will affect all stakeholders and population groups in one or another way, their active involvement in decision- and policy-making and implementation is essential, in particular, when following the intention that climate neutrality shall be achieved by Just Transitions leaving nobody behind. A broad participation of all stakeholders and the public is required.

While all stakeholders "want to make a living", their idea of that and their interests are diverse and can be conflicting. In their actual behaviour, businesses may put their economic growth first or people may want to drive freely by car or consume goods at low prices, which can clash with the efforts to reduce greenhouse gas emissions and will compromise future quality of life, in particular of vulnerable people and the younger generation.

Currently, many participation processes in cities and countries focus on informing and consulting citizens and other stakeholders. Achieving Just Transitions will need deep partnerships, new forms of co-creation and more citizen control. Co-creation will ensure that the different interests are not only analysed or heard from the "outside" but also that stakeholders are seriously involved, identifying joint solutions and agreements to manage potential conflicts.

At the same time, co-creation can foster the necessary awareness and knowledge for the task to reach climate neutrality and understanding of others' and the society's interest which leads to a higher acceptance, behavioural and structural change and ownership of decisions and their implementation; thus, ensuring a long-term commitment. Additionally, co-creation can lever even bigger innovative potential in exposing and combining the different knowledge bases and ideas of the various stakeholders.

However, the various stakeholder groups hold very different skills and capacities that enable or disable them to participate and make their voices heard. Certain groups may not have the resources, time and technical means if digital tools are used, or have the knowledge to contribute in participatory processes in the way these are organised (Kotsila et al., 2020; Shelton, 2018). Are ideas for projects and development then vetted with the broader community, where diverse voices and priorities are represented, and who will have control over what is finally implemented?(Shelton, 2018). The European Urban Knowledge Network found that participation is lower amongst those in poverty, even though they may be most affected by climate and environmental change (European Environment Agency, 2018).

Structures for co-creation are not sufficiently developed in many cities especially in countries where top-down approaches are dominant. These often manifest as regulatory barriers imposed by rigid bureaucracy (Kotsila et al., 2020), in which participation by simply information sharing remains on the lower level of taking influence on decision-making according to Arnstein's citizen participation ladder and IAP2's spectrum of public participation, which reaches from informing over consulting, involving, collaborating to empowering (Arnstein, 1969; IAP2, n.d.). Different national and local governance cultures and their structures across European countries can either promote or hamper real partnership approaches and co-creation. Obstacles may also include the reluctance of decision-makers to give away power to citizens and lack of trust that the democratic approach of co-creation will lead to implementing a joint vision of a carbon neutral Europe (Kotsila et al., 2020).

The various citizen groups need to be enabled to actively participate in Just Transitions and be supported by appropriate governance structures. UIA cities deliver a range of models for co-creation supporting a democratic transition for all. Participatory approaches are a basic requirement for all UIA projects regardless of the thematic topic. However, some of the projects put a specific focus on societal innovation making them particularly relevant here.

The projects use different forms of participation:**co-creation processes** for the design process and building of shared visions often using workshops and labs (e.g. UPPER, SPIRE,); **collaborative schemes** for the implementation of action and management in forms of innovative multi-stakeholder arrangements that can be formal and informal, like civic engagement models, public-private partnerships, co-management (e.g. Co-city, Vilawatt, CartujaQanat,); and **community-led approaches** of self-empowerment by, e.g., citizen-owned projects or participative budgets, constituting high levels of participation in decision-making (e.g. CALICO, RE/SOURCED).

Different features and tools of used participation approaches can be particularly relevant for a democratic transition for all in order to reach less active citizen and other stakeholder groups: **Tailored approaches** that are centred around such groups, personalised or area-based (e.g. S.T.E.P.S., OASIS); different **enabling strategies**

and tools to convince, motivate and train them by focusing, i.e., on well-being and quality of life, showing business and employment opportunities, the added value for investors and providing incentives and rewards or showing role models and by making data accessible, visualize development paths, providing evidence to build investor confidence, train or support with digital tools (e.g. CitiCAP), and among these, **creative tools** such as using arts and culture to engage people or gamification to make participation enjoyable whilst reaching less active groups (e.g. CAPACITyES, CUP 4 CREATIVITY).

3. Approach to analysing the UIA projects in the three sub-topics

Analysing the challenges, activities, results and lessons from UIA cities in relation to Just Transitions will involve mapping the most relevant cities and projects, both from UIA and beyond. The process will include an in-depth literature analysis to frame a fieldwork approach that will comprise surveys and city hearings, structured around the high-level and subsidiary research questions. UIA city representatives and project managers will be the central participants in these city hearings.

Furthermore, the input of key witnesses from various organisations (including European Commission DGs and relevant international organisations) will help provide context and synergies The overall process will generate in-depth analysis, case studies and recommendations of use for policy-makers at city and EU level as well as those responsible for local level implementation.

Finally, there are some inherent pitfalls of the Just Transitions narrative which may affect the upcoming analysis:

- The urgency of climate issues puts pressure on cities to act (Müller, 2018). Yet, the reality of public administration and activities still operates in a longer **timeframe** assessing the immediate leverage of UIA 3-year long projects on actual Just Transitions can be anticipated to be partial and only sketching some initial steps and inspirations.
- Ensuring that the "transition" to the "just" approaches to local policies are **not dissociated**, would be key. Yet, we can expect that this holistic approach is not yet fully embedded in many UIA city cases. Consequently, provided insights will focus more on one or the other of the aspects. As Tadzio Müller (2018), explains: "They are transitions, but far from just, or rapid (...) They are partial and insufficient for answering macroeconomic, sector-level questions."
- Related to this, the analysis will have to prevent creating further**dualisation** against "competitive" but "climate threatening" areas, such as the coal sector (with a current high number of employment) vs. "sustainable" and "climate benefitting" ones, such as the energy production sectors (yet, with a much lower level of employment).
- This study focuses on a relatively new, complex context, still conceptually novel for many, as discussed in section 2. An important role of this study is to provide clear examples that assist comprehension of the conceptual dimension, by showcasing practical effective city approaches. As already noted, frameworks like the Doughnut Economy will be useful, as well as the specific cases coming from UIA and beyond.

4. References

Adams, E., 2021. Digital Gamechanger? How Europe's cities are adapting to the impact of COVID-19 on jobs and skills. Panorama, European Commission: https://futurium.ec.europa.eu/en/urban-agenda/urban-blog/series-articles-1-digital-gamechanger-how-europes-cities-are-adapting-impact-covid-19-jobs-and?language=et

Arnstein, S.R., 1969. A Ladder Of Citizen Participation. Journal of the American Institute of Planners 35, 216–224. https://doi.org/10.1080/01944366908977225

Beretta, I., Cucca, R., 2019. Ecological gentrification. A european perspective. Introduction. SOCIOLOGIA URBANA E RURALE.

Bonneau, M., 2021. Striving towards a greener Europe: Climate adaptation and energy transition driving change in urban areas. Panorama, European Commission: https://futurium.ec.europa.eu/en/urban-agenda/urban-blog/series-articles-2-striving-towards-greener-europe-climate-adaptation-and-energy-transition-driving?language=et.

Colli, F., 2020. The EU's Just Transition: three challenges and how to overcome them.

Doughnut Economics Action Lab, n.d. About Doughnut Economics [WWW Document]. URL https://doughnuteconomics.org/about-doughnut-economics (accessed 8.5.21).

EEA, 2019. The European environment state and outlook 2020: knowledge for transition to a sustainable Europe.

European Environment Agency, Copenhagen.

EUKN, 2014. The Inclusive City - Approaches to combat urban poverty and social exclusion in Europe. The Hague.

European Commission, 2021. A Socially Fair Transition.

European Commission, 2020. A strong social Europe for Just Transitions.

European Commission, 2019. The European Green Deal. Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, Brussels, COM(2019) 640 final.

European Commission, n.d. A European Green Deal [WWW Document]. URL https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en (accessed 8.5.21).

European Commission-Joint Research, n.d. The Future of Cities [WWW Document]. European Commission. URL https://urban.jrc.ec.europa.eu/thefutureofcities/ (accessed 8.5.21).

European Environment Agency, 2018. Unequal exposure and unequal impacts: social vulnerability to air pollution, noise and extreme temperatures in Europe, EEA report. Publications Office of the European Union, Luxembourg. https://doi.org/10.2800/330000

European Environmental Agency, 2021. Urban sustainability: how can cities become sustainable? [WWW Document]. URL https://www.eea.europa.eu/themes/sustainability-transitions/urban-environment/urban-sustainability

G20, 2021. Energy Poverty: addressing the intersection of Sustainable Development Goal 7 (SDG7), development and resilience (No. Executive Note for the G20 Energy Transition Working Group and the G20 Climate Sustainability Working Group).

Grossmann, K., 2019. Energy efficiency for whom? A Conceptual view on retrofitting, residential segregation and the housing market. SOCIOLOGIA URBANA E RURALE.

IAP2, n.d. Public Participation Pillars.

IPCC, 2021. Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S. L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M. I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T. K. Maycock, T. Waterfield, O. Yelekçi, R. Yu and B. Zhou (eds.)]. Cambridge University Press.

Kotsila, P., Connolly, J., Anguelovski, I., Dommerholt, T., 2020. Drivers of injustice in the context of urban sustainability - (Preparation material for the 2nd UrbanA Arena, June 4-5 2020). UrbanA.

Lewney, R., et al., 2019. Energy Scenario: Employment Implications of the Paris Agreement. Eurofound.

Müller, T., 2018. "As Time Goes by…": The Hidden Pitfalls of the "Just Transition" Narrative [WWW Document]. URL https://medium.com/just-transitions/mueller-fc3f434025cc

Rosemberg, A., 2010. Building a Just Transition - The linkages between climate change and employment. Climate change and labour: The need for a "just transition," International Journal of Labour Research Vol.2, Issue 2, 125–161.

Shelton, R., 2018. Just Transitions as a Process with Communities, not for Communities. Just Transitions. URL https://medium.com/just-transitions/shelton-833748c7b402 (accessed 8.10.21).

Shin, S.-Y., Dongwook, K., Chun, S.A., 2021. Digital Divide in Advanced Smart City Innovation. Sustainability.

Statista, n.d. Europe: COVID-19 deaths by day [WWW Document]. Statista. URL https://www.statista.com/statistics/1102288/coronavirus-deaths-development-europe/ (accessed 8.11.21).

Stevis, D., Morena, E., Krause, D., 2020. Introduction: The genealogy and contemporary politics of just transitions, in: Just Transitions: Social Justice in the Shift Towards a Low-Carbon World. Pluto Press. https://doi.org/10.2307/j.ctvs09qrx

UCLG, 2019. Cities for Women, Sustainable Cities. The Right to the City, for Women. URL https://www.uclg.org/en/media/news/cities-women-sustainable-cities-right-city-women

UN Habitat, 2021. Cities and Pandemics: Towards a more just, green and healthy future.

UN Habitat, n.d. Cities and Pollution [WWW Document]. United Nations. URL https://www.un.org/en/climatechange/climate-solutions/cities-pollution (accessed 9.27.21).

UNRISD, 2018. Mapping Just Transition(s) to a Low-Carbon World

URBACT, n.d. How cities can live in the Doughnut? by Kate Raworth.

Verly-Jr, E., Martins de Carvalho, A., Lobo Marchioni, D.M., Darmon, N., 2021. The cost of eating more sustainable diets: A nutritional and environmental diet optimisation study. Global Public Health.

Vincent, S., 2020. Le nouveau contrat écologique et social, une boussole pour l'avenir de la transformation publique ? URL https://www.la27eregion.fr/le-nouveau-contrat-ecologique-et-social-une-boussole-pour-lavenir-de-la-transformation-publique/ (accessed 9.23.21).

Yoksoulian, L., 2021. How can cities accelerate climate action to meet COP26 goals?How can cities accelerate climate action to meet COP26 goals? (phys.org) (accessed 26.11.21).

Annex

Examples of possible negative consequences of transitions to carbon neutrality for stakeholders, territories and cities and vulnerable groups

See on UIA website