ENERGY CITIES - PAPER

SUFFICIENCY: THE MISSING PILLAR FOR A RESOURCE-WISE EUROPE

HOW LOCAL AUTHORITIES ARE SETTING AN AGENDA TO REDUCE RESOURCE CONSUMPTION AND WHAT EUROPE CAN DO TO HELP THEM

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IN EARLY JUNE 2023, 45 COUNTRIES FROM ALL AROUND THE WORLD AGREED ON THE VERSAILLES STATEMENT "THE CRUCIAL DECADE FOR ENERGY EFFICIENCY" AND CALLED FOR GOVERNMENTS TO IMPLEMENT POLICY PACKAGES THAT INCLUDE SUFFICIENCY MEASURES[1].

The concept of "sufficiency measures" or "sufficiency policies" is increasingly being used by political decision-makers. The latest International Panel on Climate Change (IPCC) report has further legitimised it. For IPCC author Yamina Saheb, sufficiency policies are "**a set of measures and daily practices that avoid the demand for energy, materials, land, and water while delivering human wellbeing for all within planetary boundaries**"[2]. This framing draws a clear line between sufficiency and efficiency, a closely related concept that relies on technical progress rather than reduced demand[3].

In a world where climate, financial, energy, and resource-related crises are hitting territories with increasing frequency and greater intensity, it has becoming more relevant to mobilise sufficiency. The energy crisis, worsened by the Russian invasion of Ukraine in 2022, has highlighted how **sufficiency policies were not only easy and low-cost to implement, but also highly beneficial and effective**. Initiatives like the Cities Energy Savings Sprint, launched by the Covenant of Mayors Europe, showed how cities, at the forefront of crises, can rapidly implement measures that reduce the use of resources[4].

Many measures motivated by the energy crisis have been extended to the local level and even integrated into more structural plans. Resource savings are commonly approved as an appropriate answer to the crisis. However, **the potential of structural sufficiency policies, capable of trans-**

forming society enough to use only the necessary resources, is largely untapped in Europe. The European Green Deal has set many ambitious goals for the European Union, including Europe's aim to reach climate neutrality by 2050, among others. However, the targets are far from being reachable, because the path taken so far is not ambitious enough. The recently published Clever Scenario shows that **carbon neutrality by 2045 and a reduction of 55% of our final energy consumption is possible if we carry out strong cross-sectorial sufficiency policies**[5]. This scenario, based on energy sufficiency, energy efficiency, and renewable energy sources illustrates a path in which Europe is fully independent of energy imports and makes a difference in climate change mitigation and adaptation.

Decision-makers often go against this, claiming that making such changes is impossible, will make them unpopular, or is overly idealistic. However, locally elected representatives in various countries have already started implementing sufficiency-based policies, and are harvesting the fruits: **greater resilience, higher quality of life, and a safe path to meet climate goals**. Furthermore, we cannot risk winters where energy costs soar and the vital needs of part of the population are not covered.

This paper will precisely explore the transformations that cities are carrying to deliver public services and shape the urban space with a sufficiency approach, especially to answer resource scarcity. By looking at examples from countries like France, Finland, or Austria, we will see that **cities also need the support of the Member States and the European Union to accelerate their progress in this area**. We will highlight opportunities at the European level, such as the Energy Union and Climate Action governance regulation, which must **integrate sufficiency to enable a socially just and accelerated transition** towards climate neutrality.

Cities' voices:

The examples quoted in this paper are based on interviews conducted with elected representatives, experts, and heads of departments of different cities unless otherwise stated. Led in spring 2023, the interviews explored cities' strategy towards resource consumption, with various focuses from energy sufficiency to circular economy and doughnut economics[6].

1. A RESOURCE CONSUMPTION REDUCTION AGENDA FOR CITIES

1.1 CITIES ON THE FRONT LINE OF RESOURCES SCARCITY

Cities, particularly, are on the front line of crises. When a resource such as energy, land, water, or materials is in short supply, whether due to an external or internal shock, cities are dealing with the immediate consequences. Indeed, the local level is the one at which citizens' needs and demands are addressed, directly. **Cities have been key stakeholders in climate change mitigation and environmental protection**, exploring more ambitious answers, like sufficiency policies.

Energy and land: two scarce resources for European cities

The interviews conducted for this paper have highlighted the scarcity of two main resources: energy and land. The stakes related to these resources differ from place to place. Naturally, other resources are becoming insufficient, such as water, but the European cities interviewed mentioned them less.

Energy

The Russian invasion of Ukraine, in late February 2022, compelled the EU to accelerate the transition to cleaner energy while simultaneously seeking new fossil fuel energy suppliers as quickly as possible. Indeed, the cheap Russian gas and oil could not be paid with EU money anymore because this would mean to finance Putin's war. To avoid an energy crisis and maintain full storage, the EU had to pay significantly higher prices to new suppliers. The consequence of this geopolitical uncertainty and higher prices is still the surge in bills. Since then, authorities at all levels have been pressured to urgently find ways of reducing energy consumption.

Energy savings have been at the top of the political agenda at each level of government – national, regional, and local – for many months. These savings have yielded clear benefits, leading to many cities developing more structural policies for energy consumption savings. The energy crisis has truly impacted every city in the European Union, which is precisely why we chose to focus on energy as a scarce resource in this paper.

Land

Cities' populations are growing, due to ongoing rural exodus, driven by job opportunities. As a result, the housing sector is put under tension. Cities are caught between two seemingly contradictory demands: to meet the growing demand for housing and to meet environmental standards, which call for less artificial land use. Many cities are also limited in their urban expansion by urbanism rules and historical protection zones. Land is a scarce resource as long as the sufficiency approach for land use is not mainstreamed.

Sufficiency is possible: the inspiring example of Flensburg

In response to resource crises, more and more cities are choosing the path of sufficiency. There are many reasons for this choice, which will be explored further in the second part of this paper. First, let's take a look at an exemplary instance of a sufficiency project addressing both land use and energy scarcity, while taking social justice into account. In **Flensburg**, a northern city in Germany, urban density is a reality. To address the growing demand for affordable and efficient housing, the city has decided to cooperate with the University of Flensburg to build a new neighbourhood in the area of the old harbour.

The Hafen-Ost project is a great example of an urban (re)generation, that coastal cities can get inspired from, but also of a sufficiency and holistic approach to urban planning.

The project started as a collaboration with the research centre Norbert Elias to draft guidelines[7]. Voted on by the city council in 2020, the guidelines determine key principles for **socially and environmentally just urban development in the area**. At the same time, citizens and politicians were engaged in conversations explaining what sufficiency is and what a sufficient neighbourhood can look like. Such dialogue has led to a greater acceptance of the project.

"**Less is more**" is one of the guidelines shaping opportunities to keep the historical maritime style. The aim is to build with the fewest resources possible and make sure that spaces are mixed and multifunctional. As the land is municipally owned, the leasing model allows rents to be regulated by a cap. **This neighbourhood aims at being climate-neutral and favours alternative mobility** with bike lanes and access to public transport, inspired by the 15-minute city model.

Urban planners have now joined the research team to elaborate a concrete plan. Consultations with citizens and current inhabitants of the area were carried out to ensure that the plan is the result of cooperation between the concerned stakeholders. The future Hafen-Ost is already showing how **sufficiency is cross-sectorial by essence** as the project tackles two different scarce resources, land and energy, while caring about affordability. The project was made possible thanks to the strong political will of the Mayor of Flensburg, Henning Brüggemann, and the smart collaboration between research and university partners and citizens. Such a neighbourhood is an inspiring holistic example of what sufficiency can mean at the local level.

1.2 SUFFICIENCY AS A TRANSFORMATIVE PROJECT FOR CITIES

Sufficiency is not about sectorial and isolated measures. Its definition implies a cross-sectoral focus that can lead to a lot of changes in the way a municipality implements policies and works daily. **Sufficiency requires cooperation between stakeholders** at the local level. It naturally fosters a cross-silo approach and pushes cities to innovate in the design and delivery of public services. The following cities' examples will illustrate how sufficiency policies can transform and support municipalities in their path to climate mitigation and protection.

Sufficiency fostering a cross-silos approach

Adopting a sufficiency approach to resource management requires significant change in the way municipalities work internally. The two following examples showcase how sufficiency leads to rethinking the way municipal departments work together.

In **Zürich**, the **strategy net zero 2040 integrates energy sufficiency and energy efficiency**[8]. For its implementation, various stakeholders have started to meet regularly. At all levels, from directors to experts, stakeholders take part in workshops, five times a year. They are involved in the long process of defining measures to get to net zero in 2040, especially sufficiency measures. Next to this cross-departmental cooperation for long-term planning, the crisis has led the city to create an energy crisis task force. This initiative gathers several departments and identifies measures that need to be implemented to respond to the energy crisis. Due to its success, the task force is still operating.

In **Vienna**, **sufficiency has been part of the decarbonisation of the energy system** – as stated in the Vienna Climate Guide – but the energy crisis has given it even more relevance[9].

This approach has increased coordination at all levels. At the municipal level, there has been increased collaboration with different stakeholders: e.g. energy suppliers, grid operators, emergency departments, fire brigades (for black-out prevention), Austrian regions, and the city administration. Cooperating and sharing information are even more important as data availability and analysis are central to energy planning. Vienna is working on collecting real-time data involving the grid operator. One definite advantage is that Vienna owns its utility which allows for deeper work relationships and discussions on energy supply.

Sufficiency changing the dynamics between municipalities and external stakeholders

Implementing sufficiency measures depends on internal cooperation and **political will**. Changes in the municipality itself also impact its relationship with partners, like energy providers, citizens, associations, or companies. The three following cities are illustrations of sufficiency and circularity policies changing of the rules of the game with stakeholders.

In **Tampere**, the city is implementing its plan for circular economy, which includes actions, among others for the built environment, i.e. for land use, and construction. To successfully implement a circular economy, the city knows that introducing innovative public procurement schemes is required to enhance market change. Backed by the national Finnish vision of implementing a circular economy at the local level, the city has developed new types of public procurement. One of the pilot projects specifically tackles the issue of street procurement. This consists of a co-creative process between the city and private stakeholders to define requirements for using secondary materials and respecting circular economy criteria detailed in the city plan. They hope to scale up the pilot projects to normal procurements in a few years.

The **Brussels-Capital Region** is playing an active role in imaging new ways to involve the city's stakeholders, from associations to researchers, companies and administrations. The capital region was among the frontrunners to experiment with the donut economics model. This work gave rise to Shifting Economy, its regional strategy for the economic transition[10]. One of the key characteristics of Shifting Economy is that it strives to build new partnerships. The strategy has pushed for a new ordinance for economic expansion aid, making environmental and social exemplarity key criteria to access public subsidies. Behind environmental exemplarity, the capital region wants to verify that the project contributes to a circular economy and adopts a more **rational use of resources**. These new criteria for public aid will come into force in 2030. It gives a significant time for organisations to adapt to it. The top up granted from 2024 onwards to already-exemplary projects stimulates all economic players to shift. Subsidies for research and innovation also apply the same criteria. Thus, the Brussels-Capital Region gives visibility to companies and other stakeholders making choices to fit in the circular future. The implementation of the donut is about imagining new ways of involving stakeholders in designing a more resource-wise future.

Sufficiency as a trigger to reinvent public service: Grenoble as role model

Public services aim to meet the needs of citizens, whether in terms of housing, transport, heating, among others. Questioning our resource consumption in light of exceeding planetary limits leads to a reconsideration and **reinvention of public services.** Grenoble, one of the frontrunners of sufficiency, has embarked on an inspiring reflection on this topic. In Grenoble, the municipal team is working to democratically define a roadmap for the future of the city, taking into account planetary limits. For Vincent Fristot, deputy mayor of Grenoble in charge of finance and ecological accounting, litigation, and energy transition, the intention is "(…) ***to develop resilient public services with shrinking resources, and that means making choices and maybe giving up on certain things. Giving up can also mean redirection of means for other priorities***".

To reach the goal of building resilient public services, Grenoble has given citizens a large role to play. For a few months in 2021, randomly chosen citizens, from different ages, genders, neighbourhoods of the city, and socio-professional backgrounds, have come together in workshops titled "ecological redirection"[11]. Two requirements were at the centre of these workshops. The environmental requirement, defined by the planet's boundaries, demands to specifically rethink human lifestyle, work, and transport. The social justice requirement ensures that public policies are built to reduce inequalities and guarantee access to common goods. Citizens' role in the workshop was central. They discussed what to prioritise in various sectors, like transport, green spaces, and consumption. The final roadmap defines for each domain what to give up on, what to keep and what to modify or start. This is a great example of how a city can **redefine priorities, in collaboration with citizens**, and also accept to give up some non-sufficiency-friendly investments or actions. A concrete example of this is the reconsideration of swimming pools in Grenoble. These facilities consume a large amount of water and energy, but they also play a crucial role in enabling every citizen to learn how to swim. Following the roadmap, Grenoble is now looking for solutions to facilitate access to a swimming place in local lakes and rivers. **The awareness of crises has led Grenoble to take a step back and rethink the way they view public services, aligning them to fit planet boundaries, creating more sufficient public services**.

Sufficiency policies are often responses to crises, but their success and effectiveness reveal their long-term potential. They are key to delivering climate action, ensuring a fair transition, and shaping future-proof cities. Nevertheless, today, sufficiency is unevenly solicited in European countries. At the EU level, steps in its direction remain timid. This is all the more regrettable because **integrating sufficiency policies into European policies is essential to achieving climate neutrality objectives on time**.

2. A SUFFICIENCY COMPASS FOR A CLIMATE-NEUTRAL EU

On the 24th of October, the European Commission published the **2023 State of the Energy Union report**, which reflects on the EU's answer to the energy crisis, the state of play of the implementation of the Energy Union, and the progress reports of the National Energy and Climate Plans (NECPs)[12]. This strategic report makes no mention of sufficiency. Initially, the energy union strategy was established under the Juncker Commission (2014-2019) to guide energy and climate policy in the EU and to deliver on 5 pillars: the security of supply, the development of an integrated internal energy market, the improvement of energy efficiency, the decarbonisation of the economy and the guarantee of innovation and competitiveness. Sufficiency was not considered at that time.

Ignoring the potential of sufficiency poses many risks for the EU. The first one is to fail to meet climate targets, as we mentioned above. Such silence also means failing to fulfil the basic needs of the most vulnerable populations. In this way, sufficiency is either a choice for the most precarious populations or a burden on the shoulders of citizens. If **sufficiency policies are entirely left to the will of voluntary individuals and governments, it would perpetuate the current status quo of an uneven and unfair use of resources based on geography and means**.

The potential revision of the Energy Union and Climate Action Governance Regulation in the coming years is a **key opportunity to integrate sufficiency as one of these pillars structuring EU energy policies**. This is primarily because it would guarantee that Member States include a sufficiency chapter in their future National Energy and Climate Plans and Long-Term Strategies.

Making sufficiency one of the strategic pillars of the energy union will enable the EU, Member States, and local governments to tap into the full potential of sufficiency policies to meet EU climate and energy goals. Therefore, **Energy Cities proposes three ways to put sufficiency back at the heart of the energy and climate discussions**.

1. Sufficiency, the missing chapter of the National Energy and Climate Plans (NECPs)

In **Tampere**, much like the rest of Finland, the focus has now broadened from solely addressing climate and biodiversity to actively implementing a circular economy. But sectors like building and renovation still lack clear legislation that would enable sufficiency incentives and practices like the reuse of material from deconstruction. Tampere's circular economy expert, Irina Simola, explains that many questions remain unanswered, such as: "Is it a product of material which can be reused or is it waste? Can you use it? And how?". This interpretation of waste legislation is very crucial when developing new ways and models to keep materials in circulation. Irina Simola states, "It is quite easy to make a strategic plan for circular economy but when you are thinking about how it is implemented in everyday life, how it is followed up, and what kind of input this follow-up gives for the next round, then we have a lot of work to do. It is not just city level, but also national, and EU legislation. We have many overlapping strategies and legislations but much less effort is being put on trying to improve policy coherence and to simplify legislative framework (than creating new requirements)".

Having sufficiency as one of the pillars of the energy union would push the EU and Member States to rethink their approach to climate and energy policies by putting the finiteness of resources and social justice on their agenda. This new pillar would build a comprehensive framework for cross-sectorial sufficiency, as well as give a clear and unified definition of the spectrum of sufficiency. **Sufficiency should therefore be integrated into all EU energy and climate-related policies and constitute a dedicated chapter in the future NECP**. This would concern all NECP sectors: building, transport, waste management, energy, industry, and, we soon hope, water, soil, and food. This new chapter would bring a cross-sectoral approach to limiting demand for resources in a fair manner. It would also define the concrete actions that Member States put in place to this end. However, the EU must not fall into the trap of adding yet another plunder, and further complicating the task of Member States for whom NECPs remain largely a bureaucratic exercise with limited impact[13]. That is why the **redesign of the energy union is essential**.

The CLEVER (Collaborative Low Energy Vision for the European Region) scenario, which aims at bridging the neutrality, energy security, and sustainability gap, helps us to imagine another selection of pillars. The potential of sufficiency to deliver climate objectives becomes evident when complemented with efficiency and renewable energies in a well-defined hierarchical framework. **The scenario considers first the demand, with sufficiency, then the intensity, with efficiency, before finally integrating supply changes with renewables, to deliver services**. It is also a modeling approach demonstrating that such a framework can help Europe become **GHG-neutral by 2045 and fully renewable by 2050**. In addition, Europe would be free of energy imports by 2050, halving fossil gas and phasing out coal before 2035[14]. However, to achieve these promises, the EU must guarantee two critical elements at all levels: sufficient funding and an increased number of qualified staff.

2. Providing sufficiency with funding and staff means

The question of funding is always central when it comes to energy and climate policies. The Swiss city of **Zurich** is well aware that "money and people" are the ingredients to success. The City of **Grenoble** has successfully mobilised funds to hire dedicated staff for sufficiency policies. The French city has indeed opened a couple of positions for sufficiency innovation, monitoring, and implementation.

Local staff is key "to switch from policymaker speech to implementation", advocates Deputy Mayor, Vincent Fristot. However, not all cities can mobilise funds for this, as they are hindered by limited operating budgets and strict rules on local government debts[15].

Studies have raised concern about the funding of essential investments to reach EU climate targets. Indeed, achieving emission reduction requires considerable efforts to allocate adequate funding at all levels. A unified definition is a first step, but it will lead nowhere if there are no means to implementat strategic plans, like the NECPs. In a recently published report "Energy Union 2.0. to deliver the European Green Deal", **Camille Defard**, head of the Jacques Delors Energy Center, emphasises that the "Energy Union still lacks adequate funding to effectively support collective efforts and policy coordination, whether addressing short- term security of supply challenges or addressing longer-term transition needs […][16].

The question of funding also covers human needs, particularly at the local level, to hire and train staff with the right skills for the challenges of transition. The campaign "**Localstaff-4climate**", launched in 2022, has succeeded in quantifying the human and local needs to achieve decarbonisation objectives in the building sector. At the European level, around "2.5 additional full-time positions per municipality per year over the next 9 years (including 2022), or 214,000 new local employment positions across the European Union" are needed, which represent around €16 billion per year for municipalities at EU level[17].

These quantified needs are substantial. Even if they do not yet exist, figures measuring the financial and human requirements for implementing structural sufficiency measures could be similar. However, it is important to acknowledge that **many sufficiency policies are, in fact, relatively inexpensive to implement**. Naturally, funding positions, like in Grenoble, of skilled staff are still essential to create and implement a sufficiency-based strategy at every level. Funding is also needed to create new places for citizens to debate sufficiency and the future of climate and energy policies.

3. Putting sufficiency up for debate

Clermont-Ferrand, a city from the centre of France, would like to see the European Union take the lead in **organising many more local citizen assemblies to get all citizens on board** with the transition. For Anne-Laure Stanislas, deputy mayor of Clermont-Ferrand, developing citizen assemblies is key when taking measures for sufficiency: "We need to work on sufficiency based on people's need (…). We have to ask ourselves: What are our needs? What are the resources we can use? And how to fight energy poverty [with them]?"[18].

Citizen assemblies, like the one organised in Clermont-Ferrand, on average tend to support a lot more sufficiency measures compared to the ones put forth by policy-makers. Indeed, a recent study from the junior research group "ENSU" is comparing mitigation policy recommendations formulated by citizen assemblies, in ten countries, with the ones written in NECPs[19]. According to the authors, **39% of citizen assemblies' policy recommendations include sufficiency,** which is a great deal more than the NECPs. The average approval rate of these policies is around 93%, with the highest rates for regulatory policies and fiscal and economic instruments. This study goes even further by asserting that the significance of these recommendations, calling for a shift in regulatory policies towards sufficiency, represents a "**sufficiency turn**" in climate and mitigation policies.

There is an urgent need to put sufficiency up for debate, within citizen assemblies at all levels. **Such debates are the only way not only to legitimise sufficiency policies, but also for them to be designed by and for citizens in a participatory approach**. In this way, all cities – not just those with the means and will to do so – could genuinely rethink public services, taking into account the scarcity of resources while achieving climate neutrality.

CONCLUSION

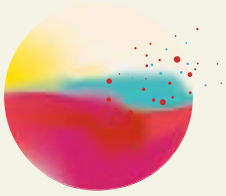
The time has come to **put sufficiency at the heart of European strategies and texts**. In the short term, we cannot afford another winter with exorbitant energy costs and unmet essential needs of the population. In the long term, "If we continue to ignore sufficiency policies, the 1.5 °C target is out of reach and the case of EU becoming climate neutral by 2050 is simply impossible" underlined Yamina Saheb, lead author of the IPPC[20].

Sufficiency is a pragmatic response to the scarcity and poor distribution of resources that Europe is already facing and will have to confront even more in the coming years.
Local governments and citizens are ready to embark on this sufficiency turn, provided that there is a joint debate, integration into the decision-making process, and the provision of appropriate means to turn the policies into action.

Energy Cities therefore hopes that the next mandates of the European Parliament elected in June 2024 and the subsequent Commission for 2024-2029 will **put sufficiency into action at the European level, with the aim of ensuring social justice while respecting planetary boundaries and reinforcing the EU's resilience**.

REFERENCES

1. IEA, *"Versailles Statement: The crucial decade for energy efficiency"*, 8 June 2023
2. IPCC, *Climate Change 2022: Mitigation of Climate Change*, Full report, 2022, p31
3. Read Energy Cities evolving Glossary "*Decoding Sufficiency, The evolving glossary of a fair and resource-wise local economy*" 2023
4. Covenant of Mayors for Climate & Energy Europe, "*Building on the Cities Energy Saving Sprint*"
5. CLEVER "*CLEVER final report, executive summary*", June 2023
6. Doughnut economics action lab "*About Doughnut Economics*"
7. Flensburg "*Zukunft Hafen-Ost. Leitlinien für die Entwicklung eines nachhaltigen urbanen Quartiers*" (only in German)
8. *Zurich's Environmental Strategy*
9. Vienna *Climate Guide*, 2022
10. *Shifting Economy Brussels*
11. Ville de Grenoble, *Ateliers citoyens de redirection écologique* (in French)
12. European Commission "*State of the Energy Union 2023: EU responds effectively to crisis, looks at the future, and accelerates the green transition*", 24 October 2023
13. Jean Pisani-Ferry, Simone Tagliapietra & Georg Zachmann, "*A new governance framework to safeguard the European Green Deal*" Policy Brief, Bruegel, 6 September 2023
14. CLEVER "*CLEVER final report, executive summary*", June 2023
15. Energy Cities, *"Human capacity in local governments: the bottleneck of the building stock transition"*, April 2022, p 8
16. Camille Defard, Head of the Jacques Delors Energy Centre, Research Fellow in EU Energy Policy, *"Energy Union 2.0. to deliver the European Green Deal: stronger governance, common financing and democratic tools",* Report n°127, November 2023, p 106
17. Energy Cities, "*Human capacity in local governments: the bottleneck of the building stock transition*", April 2022, p 3
18. Anne-Laure Stanislas, the Covenant of Mayors Europe 2023 Conference "Cities on the Frontline of the Energy Crisis", March 2023"
19. Jonas Lage, Johannes Thema, Carina Zell-Ziegler, Benjamin Best, Luisa Cordroch, Frauke Wiese, "*Citizens call for sufficiency and regulation — A comparison of European citizen assemblies and National Energy and Climate Plans*" Energy Research & Social Science, Volume 104, 2023.
20. Yamina Saheb during the European Sustainable Energy Week (EUSEW) session "*The untapped potential of sufficiency to meet EU climate goals*" organised by Energy Cities and EEB, June 2023



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Energy Cities' mission is to empower cities and citizens to shape and transition to future-proof cities. We showcase concrete alternatives deployed by cities, we advocate changing policy and economic governance at all levels and we foster wide cultural change leading to a future-proof society. Energy Cities community is composed by local leaders of thousands of cities in 30 European countries.