



ENERGYCITIES

ENERGY-CITIES.EU

HUMAN CAPACITY IN LOCAL GOVERNMENTS: THE BOTTLENECK OF THE BUILDING STOCK TRANSITION

214,000 NEW LOCAL JOB
POSITIONS NEEDED TO DECARBONISE
THE EU BUILT ENVIRONMENT





AUTHORS

AMÉLIE ANCELLE
MÉLANIE BOURGEOIS
JULIEN JOUBERT

PUBLICATION DATE

APRIL 2022

Disclaimer

This paper has been supported by the European Climate Foundation. Responsibility for the information and views set out in this paper lies with the authors. The European Climate Foundation cannot be held responsible for any use which may be made of the information contained or expressed herein.



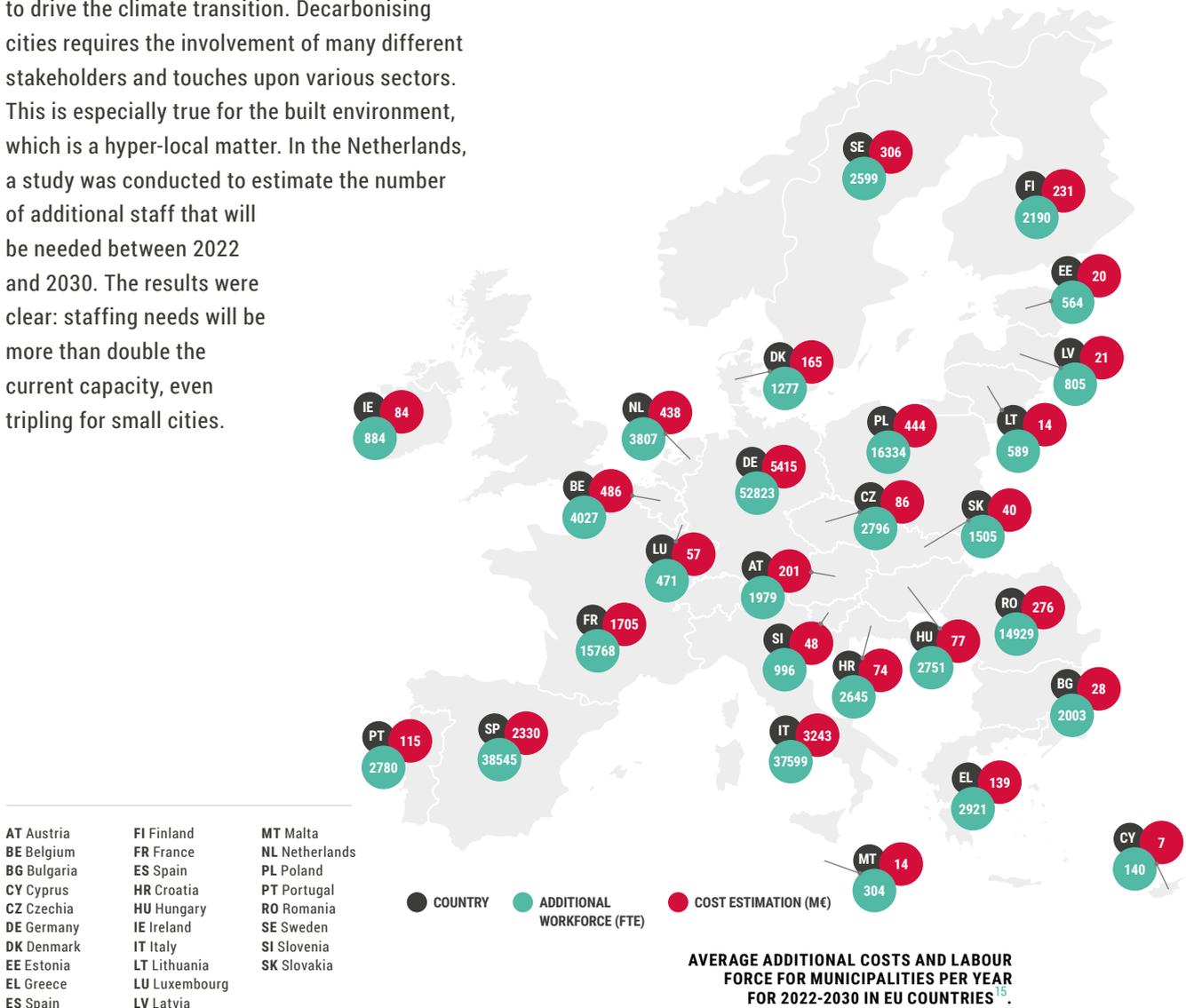
EXECUTIVE SUMMARY

Local governments are at the forefront of managing crises. It has been true with the COVID crisis, it is still true with the war in Ukraine and the massive immigration which has resulted. The climate emergency is a crisis and should be treated as such. To be able to do so, local governments rely on their staff, which implies having a large enough local workforce to carry out the necessary tasks. However, municipalities are having trouble recruiting the staff they need because of several hurdles: limited operating budgets, strict rules on local government debts, a need to increase the attractiveness of employment, etc.

The European Union and national governments need strong local energy-related public services to drive the climate transition. Decarbonising cities requires the involvement of many different stakeholders and touches upon various sectors. This is especially true for the built environment, which is a hyper-local matter. In the Netherlands, a study was conducted to estimate the number of additional staff that will be needed between 2022 and 2030. The results were clear: staffing needs will be more than double the current capacity, even tripling for small cities.

The positions to be filled are diverse: energy analysts, project managers, urban developers, engineers, experts in citizen and stakeholder engagement, energy advisers, communication officers, public building experts, social housing experts...

How does it look like 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. In terms of costs for municipalities, this will be around €16 billion per year at the EU level, which, in 2019, represented only 3% of local governments' public expenditures.





However, local governments will have to face a 53% increase in employee expenditures in their building and climate departments, which represents a massive shift in investment priority. But, investing in staff locally can result in more investment and thus accelerate decarbonisation. Experiences in France and Spain are encouraging and show the way, benefitting not only citizens, but also municipalities. It is therefore necessary to recruit and train local staff to have strong local energy public services, to achieve the climate transition in buildings, and to increase local investments and jobs. So, what are the keys to move forward in recruiting more local staff?

- 1. Provide funding and encourage local cooperation** by reallocating budgets to finance local job positions, encouraging the local or regional coordination to pool local workforces, sharing extensively of local best practices related to the issue.
- 2. Develop a human resources strategy for local workforces** by assessing the staffing needs of each subnational government, developing plans to attract and facilitate the recruitment by local or regional administrations and their public bodies, providing training to climate and energy staff members, adapting education and training programs to meet the demands of the labour market.
- 3. Enable local and regional governments to develop their own green budgets and workforce** by rethinking budget organisation within cities to boost energy and climate expenditures; removing regulatory barriers to facilitate energy and climate investments, in particular human resources; empowering cities via local environmental taxes.

Let's spread the word and support decarbonisation. For more information, have a look at the [website](#) of the Local Staff for Climate campaign and sign the [manifesto](#).



TABLE OF CONTENT

EXECUTIVE SUMMARY	03
INTRODUCTION	06
UNDERSTANDING THE TRANSITION'S NEEDS	07
<ul style="list-style-type: none"> » Transition in the built environment: what is this? 07 » What is at stake for cities? 08 	
LOOKING AT THE NUMBERS	10
<ul style="list-style-type: none"> » What are the needs of local staff to scale the transition at the required level in The Netherlands? 10 » What are the needs of local staff to scale the transition at the required level in the EU? 13 	
INVESTING IN LOCAL STAFF: A MUST-DO WHICH BENEFITS THE ENTIRE ECONOMY	19
<ul style="list-style-type: none"> » Building decarbonisation: to be public and local...or not to be? 19 » Long-term and internal positions in municipalities are key for onsistent and long-term actions 19 » Staffing local governments is an investment which pays off 21 	
THE DIFFICULTY TO ATTRACT THE RIGHT CANDIDATES: THE NEED FOR BETTER SALARIES AND EMPLOYER BRANDING	23
<ul style="list-style-type: none"> » Aligning salaries of local public servants with their importance in achieving climate-neutrality 23 » Reconsidering local public activities by developing stronger employer branding 24 	
RECOMMENDATIONS: HOW TO CREATE 214,000 ADDITIONAL POSITIONS?	26



INTRODUCTION

After years of discussion with various European cities on barriers and levers to the decarbonisation of heating and cooling systems, one issue always came back: human capacity. As diverse in size, geographic location, or advancement in the transition as cities are, they all faced this problem at some point. Local governments do not have enough full-time employees who dedicate to working on the transition; and this was not merely due to a lack of relevant skills or knowledge.

Although several studies on the investment needed to carry out the decarbonisation of economies have been conducted, very few have estimated the necessary operating budgets. Even fewer studies have focused on local governments, even though they are a key in order to succeed, due to their ability to act at the local level. The example of the Recovery Fund by the European Union (EU) is symptomatic: while there are billions of euros available for investment, their use is rather slow. Two reasons are behind this: a lack of capacity to develop projects, and the lack of a priority framework ensuring that the projects being financed match the urgency not only in the short term but also in the long-term and are conducted in a sustainable manner¹.

Building decarbonisation is not just designing an energy plan. It goes beyond the energy department of a municipality. A variety of specialists must be involved: urban planners, energy engineers, experts in stakeholder engagement, communication, and monitoring and evaluation. Aware of this challenge, the Dutch Public Administration Council commissioned a study in 2020 on the [“Implementation costs of the Climate Agreement for local and regional authorities in 2022 – 2030”](#).

Energy Cities reviewed this study in this [article](#) published in September 2021, which set out the following takeaways:

- » Energy planning is a long-term process requiring cities to employ skilled people on a long-term basis.
- » In the Netherlands, by 2030, the biggest cities will need to double staff resources and medium cities to triple them, while staff resources of smaller cities will have to be multiplied by a factor of 2.5.

Whether using internal staff or subcontracting the work, these resources come at a cost which is often too high for small and medium-sized cities. To raise awareness among policy makers at the national and European levels and allow for long-term employment solutions rather than only staff reallocation, Energy Cities wants to bring tangible numbers to the discussion with this publication.

When it comes to supporting the heat and building transition, EU, national, and local policies are interlinked. To properly tackle the energy transition, policy makers must acknowledge the massive effort required at the local level in terms of staff capacities. They shall measure the leveraging power of local governments' staff to unlock this transformation. They shall provide the adequate framework and support to enable this transition. This will be key in the race to achieve 55% greenhouse gas emission reduction by 2030, and climate neutrality by 2050.

¹ [“From Brussels with love: the secret to spending the recovery fund”](#), Euractiv, 16 April 2021



UNDERSTANDING THE TRANSITION'S NEEDS

TRANSITION IN THE BUILT ENVIRONMENT: WHAT IS THIS?

These numbers have been shared so often that they are no longer a surprise: buildings represent around 40% of energy consumption in the European Union. In addition, 80% of the existing building stock will still be there in 2050. With the Renovation Wave, the European Commission strengthened the need to (profoundly renovate) the built environment. Some provisions in the proposed recast Energy Efficiency Directive and the Energy Performance of Buildings Directive by the European Commission may strengthen this initiative, if enacted by the European Parliament and the Council. Local governments are expected to play a crucial role in these renovations, leading by example. For instance, in Article 6 of the proposed recast Energy Efficiency Directive, local authorities are expected to renovate at least 3% of their public building floor area. However, decarbonising the built environment goes beyond public buildings.

According to BPIE, around 97% of the buildings in the EU need to be upgraded to achieve the 2050 climate neutrality goal².

Decarbonising the built environment therefore concerns everyone and implies interacting with a great variety of stakeholders: citizens, social housing associations, associations of owners, private companies, craftsmen and -women (builders, installers...). Buildings are a local, if not a neighbourhood matter. Therefore, municipalities play a big role in supporting their decarbonisation. Several key elements are constitutive of this equation: building insulation and efficiency, heating and cooling systems, energy sufficiency. The Dutch study distinguished nine actions, encompassing a list of detailed tasks, to be undertaken by cities to decarbonise the built environment, which can be gathered in six categories³:

LEVEL	CATEGORY	ACTION
NEIGHBOURHOOD	Neighbourhood decarbonisation plan	Drafting
		Implementing (incl. guiding residents)
CITY	Collaboration	Collaborating with housing corporations & owner associations
	Permitting and enforcement	Implementing permits, supervising, and enforcing
	External communication	Provide municipality-wide communication to mobilise citizens (incl. energy advisory services)
	More sustainable buildings	Making public buildings more sustainable
		Making social real estate more sustainable
		Making other non-residential constructions more sustainable
Monitoring and evaluation	Monitoring and recalibrating the heat vision of the city	

TABLE 1: CATEGORISATION OF ACTIONS TO DECARBONISE THE BUILT ENVIRONMENT AT CITY LEVEL

² BPIE factsheet, "97% of buildings in the EU need to be upgraded", October 2017

³ Implementation costs of the Climate Agreement for local and regional authorities in 2022 – 2030, Andersson Elffers Felix, September 2020



This categorisation is, of course, not exhaustive. It primarily aims at structuring the work of cities and better identifying the needs for specific skills and dedicated time. It also shows that these actions are common to every EU city committing

to climate neutrality. Some key drivers of success (e.g., develop data policies and platforms, or adopt the heat hierarchy principle) can be found in our publication "[*Why and how fossil fuels in buildings will be history by 2050*](#)".

WHAT IS AT STAKE FOR CITIES?

There are three key actors in decarbonising cities: the local government, citizens, and external stakeholders. National governments are expected to provide the right framework to support the necessary initiatives and help build a common "climate culture" within the different public governments. To enable this, staff will need to be trained and cities will require an even larger workforce to have a transversal approach. Like the one done in the Netherlands, the [*Institute for Climate Economics*](#) (I4CE) will release, in summer 2022, a quantitative study assessing the functioning budget needs of municipalities in order reach climate-neutrality in France, including the implications in terms of staff recruitment and projections.

The tasks to be performed by local governments to decarbonise the built environment represent an important budget, partially in terms of investment (primarily in public buildings' decarbonisation), but mostly in terms of staff capacity and skills. The most frequent difficulties highlighted by cities are:

- » The need for training local civil servants, including lifelong learning, training, and upskilling. Decarbonisation will require new knowledge, skills, and new ways of working and communicating, especially to overcome the silo

effect. The current framework does not offer enough room for manoeuvre and allow civil servants to act and not only react.

- » The discrepancy between budget governance and decarbonisation planning. The ways in which budget are drafted do not take into account that which is necessary to implement long-term solutions. Subsidy transfers from other government levels (especially national ones) do not match the needs assumed by local governments.
- » Funding opportunities, especially European funding opportunities, are very complex. In addition, their time-limitations are not always aligned with the timeframe to develop projects. They thus do not constitute a long-term finance mechanism for decarbonisation issues.
- » The inability of cities to recruit the staff they need. First, because their budget is very limited, especially in terms of operating budgets, which does not allow for the creation of new positions, especially in the long term. Additionally, workforce investments for energy transition are not an exempted from the strict rules governing local government debt. Finally, local governments have recruitment problems, as salaries are less advantageous than in the private sector and their employer brand is less developed.



In the Netherlands, at the end of 2021, cities submitted decarbonisation plans in line with the Climate Agreement which they had signed. By 2030, cities must be halfway to phasing out gas from districts (i.e., the implementation phase). The total foreseen funding by 2026 is of €800 million for the entire country. While this may seem like a lot, it will be shared amongst the national and local levels, with local authorities likely receiving less of the share. In addition, this total amount is less than the one estimated in the original study, in which the annual costs for municipalities are estimated between €479 to €522 million in 2022 and will rise to between €771 to €953 million in 2030!

An additional hurdle, reported by Delft and confirmed by other municipalities, is the impossibility of cities finding the necessary

workforce, even if they were to have the recruitment budget. All cite a general lack of capacity in all sectors: there are not enough people with the right skills.

In addition, decarbonising the built environment is interwoven linked with other adjacent sectors, like the circular economy and the social sector. Different departments of the municipality must be involved, as well as civil society, which means having enough staff to handle these interactions.

One solution explored by the country is creation of the *Regional Energy Strategies* (RES). Through RES, public authorities, residents, businesses, grid operators, energy collectives and social organisations work out together to create the best conditions to collectively achieve the Climate Agreement targets.

BOX 1: THE DUTCH EXPERIENCE

For these actions to be replicated on a larger scale and to give cities a maximum benefit, municipalities need the right capacity. Changing the way decarbonisation is viewed, developing

budgets, even tendering, implies having enough trained people to implement and explore those new paths and start working now on creating new sustainable positions within local administrations.



LOOKING AT THE NUMBERS

WHAT ARE THE LOCAL STAFF NEEDS TO SCALE UP THE TRANSITION AT THE REQUIRED LEVEL IN THE NETHERLANDS?

DECARBONISING THE BUILT ENVIRONMENT MEANS AN INCREASE OF 1.1% OF LABOUR COSTS FOR DUTCH MUNICIPALITIES

According to the Dutch national energy and climate action plan, 1.5 million existing homes and 1 million non-residential buildings need to be retrofitted and become gas-free by 2030⁴. Starting with 50,000 existing homes retrofitted per year, the pace should be at 200,000 homes per year in 2030, which should lead to a reduction of 4.4 MtCO₂e by 2030. To achieve these goals, the 355 Dutch municipalities would need to hire **2,101 additional FTE employees starting in 2022, growing to 5,326 additional full-time equivalent (FTE) employees**

in 2030 (compared to 2019)⁵. For the 2022-2030 period, these increases in the labour force represent an additional cost of €3,940 M for all municipalities, i.e., €438 M per year. In 2019, local governments in the Netherlands spent €40,138 M on employees related expenditures⁶.

Including other non-building sectors, Dutch cities will have to additionally spend around 500 M€ in 2022 and between 771 and 953 M€ in 2030 (including material costs). Figure 1 below shows the evolution of the implementation costs of the Climate Agreement for municipalities in the Netherlands, in total and for the built environment in terms of employees' expenditure costs.

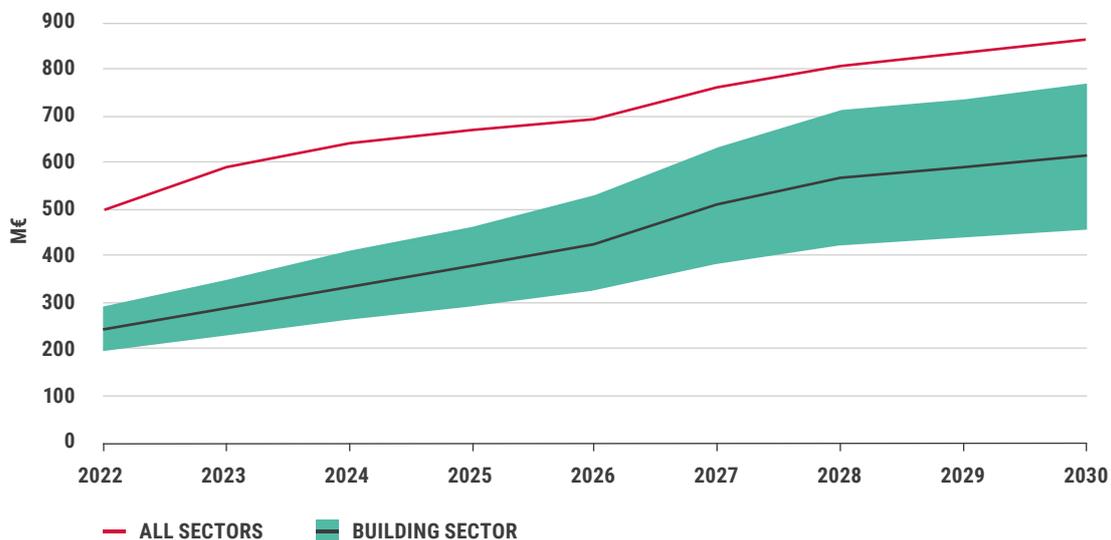


FIGURE 1: IMPLEMENTATION COSTS OF THE CLIMATE AGREEMENT FOR MUNICIPALITIES IN THE NETHERLANDS (EMPLOYEES' EXPENDITURE COSTS ONLY)⁷

⁴ Source: *Dutch National Climate Agreement*, 2019

⁵ Source: *Implementation costs of the Climate Agreement for local and regional authorities in 2022 – 2030*

⁶ Source: *Eurostat*

⁷ Source: Own calculations for the building sector, based on *Implementation costs of the Climate Agreement for local and regional authorities in 2022 – 2030*



On average, each Dutch municipality will have to recruit around 11 FTE for the decarbonisation of the buildings sector over the period 2022-2030,

leading to an additional current expenditure of around €1.2 M per year⁸. The general evolution over the period can be seen in Figure 2.

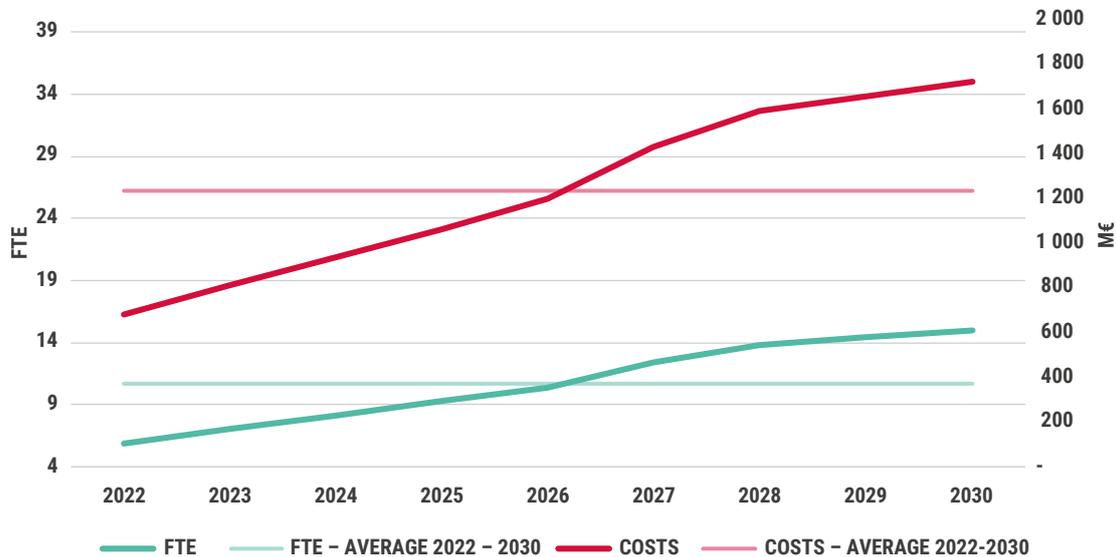


FIGURE 2: AVERAGE ADDITIONAL LABOUR FORCE AND COSTS FOR THE BUILDINGS' DECARBONISATION OF ONE DUTCH MUNICIPALITY

SCALING CLIMATE ACTIONS REQUIRES MORE EFFORT BY SMALLER MUNICIPALITIES

Decarbonisation actions come with very different needs according to the size of the municipality. In the above-mentioned study, four categories of cities were defined:

- ④ Very big cities (above 350,000 inhabitants)
- ④ Big cities (between 80,000 and 350,000 inhabitants)
- ④ Middle-sized cities (between 40,000 and 80,000 inhabitants), and
- ④ Small cities (below 40,000 inhabitants).

While for the very big cities the average estimate is 75 FTE for the period 2022-2030, the needs are estimated at 25 FTE for big cities, 14 for middle-sized cities and 6 FTE for the small ones. However, all of them require a multiplication by at least a factor of 2.3 between 2022 and 2030, as a result of the necessary increase in the renovation rate in order to achieve the 2030 goal.

In general, the additional costs are proportionally greater for smaller municipalities than bigger ones. For instance, the municipality of Amsterdam (863,000 inhabitants) employs 16,000 persons, while the one of Schiermonnikoog (936 inhabitants) has 25 employees⁹. This difference is also reflected in another indicator: for the 224 small Dutch municipalities, the estimate of additional staff needs leads to an average of 25 FTE for 100,000 inhabitants, while the 4 very big Dutch

⁸ Source: *Implementation costs of the Climate Agreement for local and regional authorities in 2022 – 2030*

⁹ Source: *Association of Netherlands Municipalities*



cities would require on average 12 FTE per 100,000 inhabitants to conduct the different actions planned for the buildings' decarbonisation. The study estimated the needs of civil servants based on the size of districts and their number of buildings. In dense cities, buildings are usually

multi-apartment ones, which explains this difference in terms of civil servants per 100,000 inhabitants. Yet, big cities are usually wealthier than smaller municipalities. **Specific support for smaller cities and for cross-municipality collaboration is thus required.**

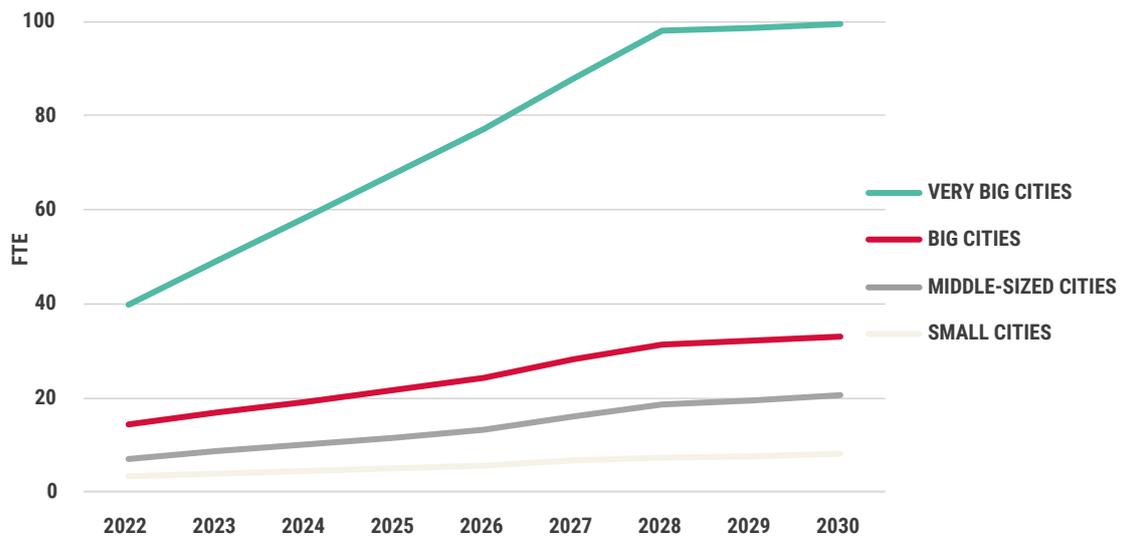


FIGURE 3: ADDITIONAL LABOUR FORCE NEEDED FOR BUILDINGS' DECARBONISATION IN DUTCH MUNICIPALITIES, ACCORDING TO THEIR SIZE¹⁰

¹⁰ Source: *Implementation costs of the Climate Agreement for local and regional authorities in 2022 – 2030*



WHAT ARE THE LOCAL STAFF NEEDS TO SCALE UP THE TRANSITION AT THE REQUIRED LEVEL IN THE EU?

€16 BILLION PER YEAR TO ASSIST MUNICIPALITIES, I.E., A 3% INCREASE OF EU LOCAL GOVERNMENTS' EMPLOYEE EXPENDITURES

By extrapolating the results of the Dutch study to the local governments of the EU countries¹¹, we estimate that an average of **214 000 additional FTE local civil servants are needed per year for the period 2022-2030 to succeed at the building decarbonisation of our cities**. On average across the EU, each municipality would need 2.5 additional FTE per year over the next 9 years (including 2022). **The related costs for municipalities would be around 16 billion EUR per year**, which represents 3% of the €493 billion spent by local governments in public expenditure in 2019¹².

This extrapolation is, of course, subject to some limitations¹³. The results are highly dependent on the distribution of municipalities across the four categories of cities based on population in the different countries. The average population of municipalities is different across the EU-countries: from less than 2,000 inhabitants in Cyprus, France, Slovakia, and Czechia to more than 40,000 inhabitants in Lithuania, the Netherlands, Denmark, and Ireland. Corrections have been made¹⁴ to take this difference into

account. However, national values should be used with caution, and **we call on EU national governments to replicate the study made in the Netherlands and adapt it to their own contexts**.

According to the methodology used, the figures below for Spain, Luxembourg, Romania, Malta, Germany, Italy, Croatia, and Slovenia are probably overestimated, while figures for Czechia, Slovakia, France, Cyprus, Hungary, and Austria are probably underestimated. This said, we consider that €9 to €23 billion per year (average: €16 billion) is a fair estimate of what EU municipalities will need to expend in order to give us a chance to reach the decarbonisation target of the building sector by 2030.

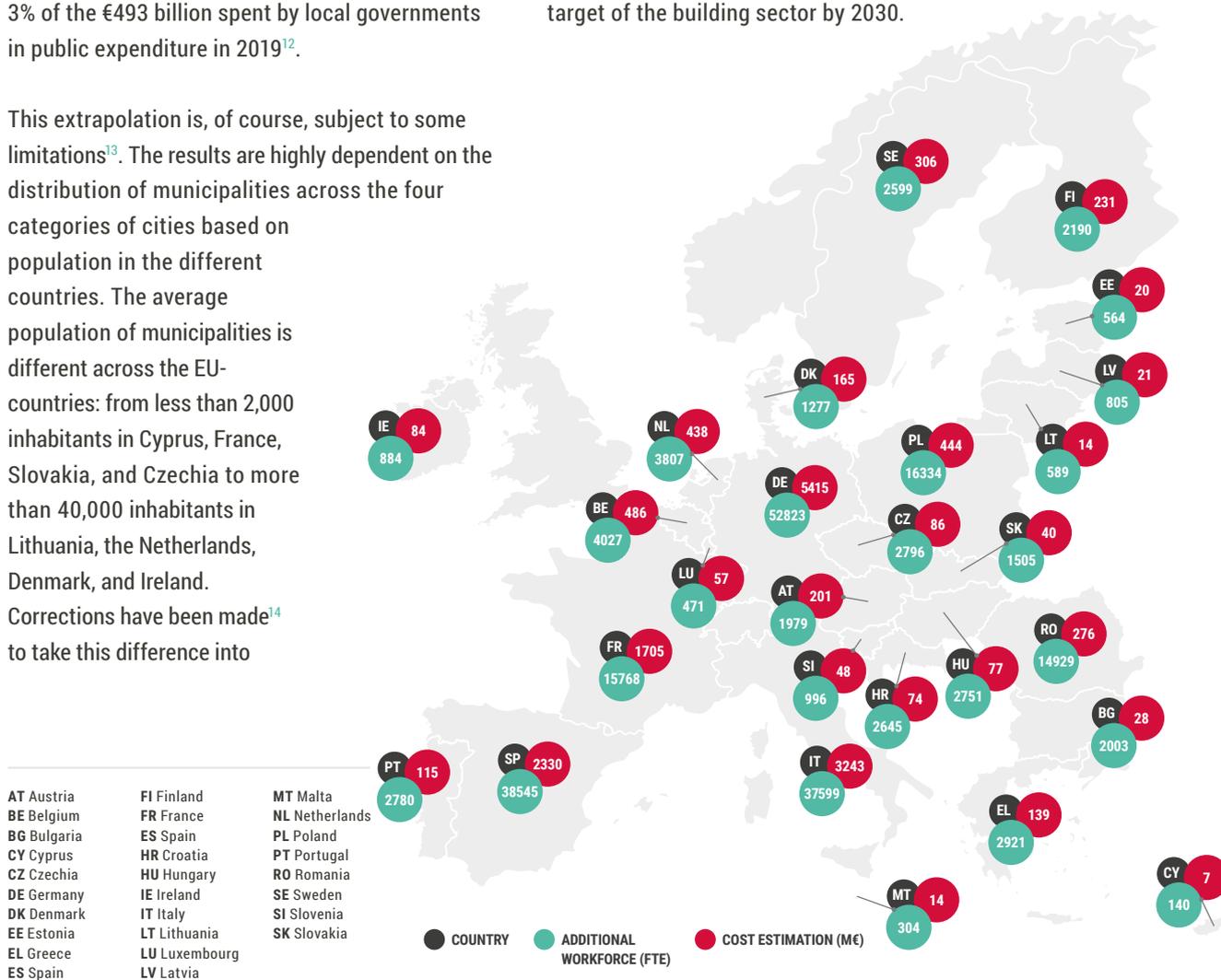


FIGURE 4: AVERAGE ADDITIONAL COSTS AND LABOUR FORCE FOR MUNICIPALITIES PER YEAR FOR 2022-2030 IN EU COUNTRIES¹⁵.

¹¹ See the [methodology note](#)

¹² Source: [Eurostat](#)

¹³ See the [methodology note](#) for a more detailed discussion of the limits and choices made

¹⁴ Idem.

¹⁵ Source: own calculations based on [Implementation costs of the Climate Agreement for local and regional authorities in 2022 – 2030](#). See the [methodology note](#) here for more information.



CENTRALISED STATES AND STATES WITH A LIMITED PUBLIC SECTOR WILL NEED TO INVEST MORE AT THE LOCAL LEVEL TO ACHIEVE BUILDINGS’ DECARBONISATION

Keeping in mind the limitations mentioned above regarding national figures, one trend appears when comparing EU countries in terms of increases in employee expenditures for buildings’ decarbonisation. This labour force increase

represents a higher gap for local governments having less means, usually in centralised states and/or in states with a limited public sector. Figure 5 below shows in mint the local governments’ staff expenditure in percentage of GDP for the year 2019, which is a good indicator of local governments’ capacities, compared to the additional costs of buildings’ decarbonisation for municipalities in % of local governments’ staff expenditures (in red).

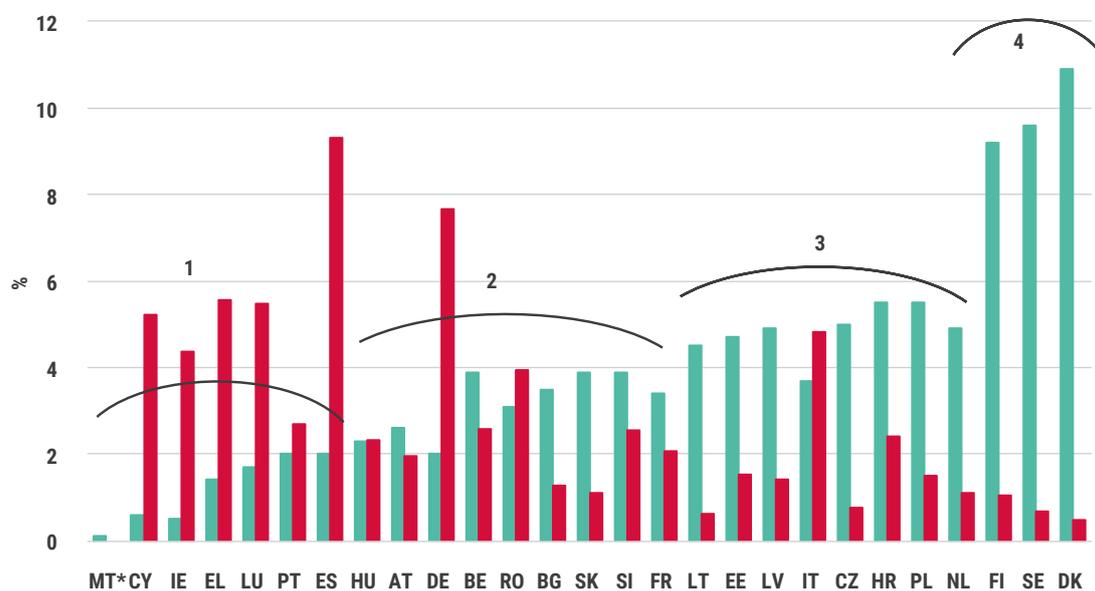


FIGURE 5: LOCAL GOVERNMENTS’ STAFF EXPENDITURE IN GDP % IN 2019 (IN MINT) VS. ADDITIONAL COSTS OF BUILDINGS’ DECARBONISATION (IN RED)¹⁶

***FOR MALTA, THE ESTIMATION IS AN INCREASE OF NEEDS OF 101% OF THEIR CURRENT STAFF EXPENDITURE. HOWEVER, THE CONTEXT IS VERY SPECIFIC DUE TO THE VERY SMALL SIZE OF THE COUNTRY, AND ITS VERY IMPORTANT CENTRALISATION.**

¹⁶ Sources: Eurostat (2019 values) and own calculations



There are four different groups which stand out in Figure 5, with two main factors of distinction: the share of GDP devoted to public expenditure and

how much of the public expenditure is allocated to local governments. The main characteristics are summarised in Table 2 below:

GROUP 1 - LITTLE DEVELOPMENT OF LOCAL PUBLIC SECTOR

- » In Spain, public expenditures represented 42.1% of GDP in 2019 (EU average = 46.5%), but the local level only represents 14% of the general public expenditure.
- » In Greece, local governments' expenditure represented only 7% of general public expenditure in 2019.

Average expected increase of current employee expenditures to meet staffing needs for building decarbonisation: 8%

GROUP 2 - LIMITED DEVELOPMENT OF LOCAL PUBLIC SECTOR

- » In France and Germany, local governments represented respectively 20% and 18% of general public expenditure in 2019.

Average expected increase of current employee expenditures to meet staffing needs for building decarbonisation: 4%

GROUP 3 - MODERATELY DEVELOPED LOCAL PUBLIC SECTOR

- » In Italy and Poland for instance, local governments represented respectively 29% and 34% of general public expenditure in 2019.

Average expected increase of current employee expenditures to meet staffing needs for building decarbonisation: 3%

GROUP 4 - WELL-DEVELOPED LOCAL PUBLIC SECTOR

- » In Denmark, Sweden and Finland, local governments are predominant compared to other government levels and the public sector is well-developed (general public expenditure represents more than 49% of GDP), leading to a well-developed local public sector.

Average expected increase of current employee expenditures to meet staffing needs for building's decarbonisation: 0.7%

TABLE 2: LEVELS OF DEVELOPMENT OF LOCAL PUBLIC SECTOR AND ADDITIONAL NEEDS OF STAFF EXPENDITURES FOR BUILDINGS' DECARBONISATION



ALL EU CITIES LACK HUMAN RESSOURCES CAPACITY TO UNLOCK BUILDING DECARBONISATION

Since the estimates in the previous sections are based on a Dutch study, Energy Cities decided to widen the scope and to ask cities from other countries on their different staff need estimates. We conducted a [survey](#)¹⁷ amongst our members and other cities located in different European, national and regional networks. The initial results indicate that most of them consider the various estimates regarding staffing needs for the

different actions (designing heating plans, implementing them, mobilising and advising citizens and businesses, supporting building companies and real estate companies, retrofitting public buildings, monitoring the heat transition) relevant in their contexts. This is particularly the case for Polish cities, for which the additional required workforce represents a substantial increase compared to the number of employees already working on decarbonising buildings (see Figure 6 below, in which results per municipality size need to be taken with caution due to the limited number of answers).

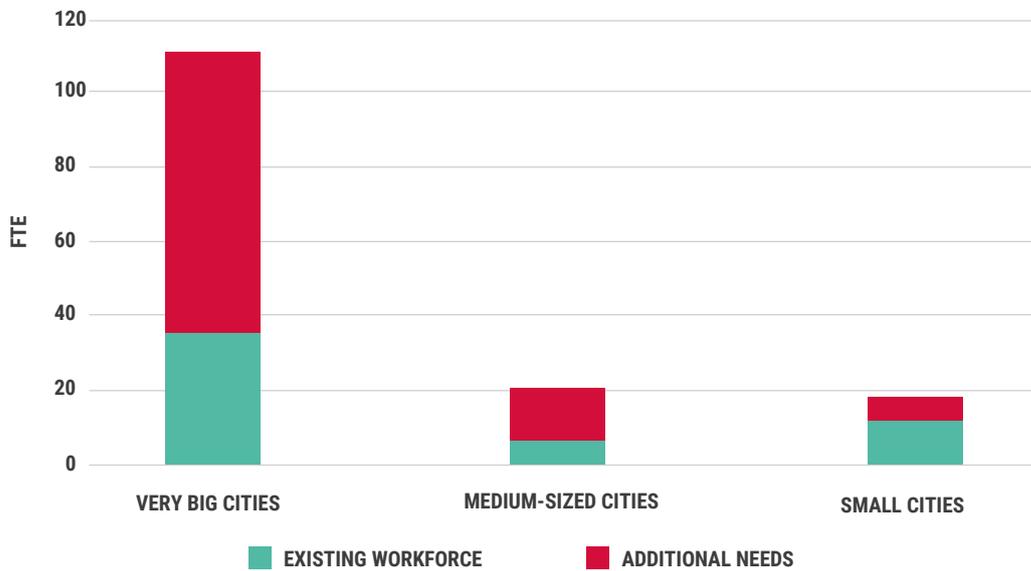


FIGURE 6: AVERAGE EXISTING AND REQUIRED WORKFORCE WORKING ON BUILDINGS' DECARBONISATION IN POLISH MUNICIPALITIES ACCORDING TO THEIR SIZE¹⁸

¹⁷ This survey will be open until end of June 2022. If you are a municipality, please feel free to share your input with us!

¹⁸ Source: Survey (based on 15 answers)



A SMALL STEP FOR SOCIETY, A GIANT LEAP FOR LOCAL GOVERNMENTS

If the staffing increases needed to decarbonise buildings represents a 3% increase of EU local governments' employee expenditures, it represents an increase of 53% of the employee expenditures of local governments in the Fuel and Energy, Environmental Protection and Housing and Communities sectors. Local governments are thus facing the need for a massive staffing increase of more than half the currently existing staff in the different departments in these sectors and would need to reorganise their budgets and priorities. For instance, according to the Statistisches Bundesamt, the German statistical institute, German municipalities have 139,230 employees (full-time and part-time) working in the fields of spatial planning and development,

construction and living, and nature and landscape protection. According to our calculations, around 53,000 additional FTE would be needed to decarbonise the built environment in Germany.

If we compare these estimates with other public services, like health and education, the number of civil servants remains very low. For instance, the number of medical doctors including pharmacists and dentists but excluding nursing and other care professionals in the different EU countries is above 300 practitioners per 100,000 inhabitants. The number of teachers in the primary and secondary education are between 778 (Romania) and 1,844 (Belgium) per 100,000 inhabitants, while the decarbonisation of buildings would require on average, across the EU, 48 additional civil servants at local level per 100,000 inhabitants.

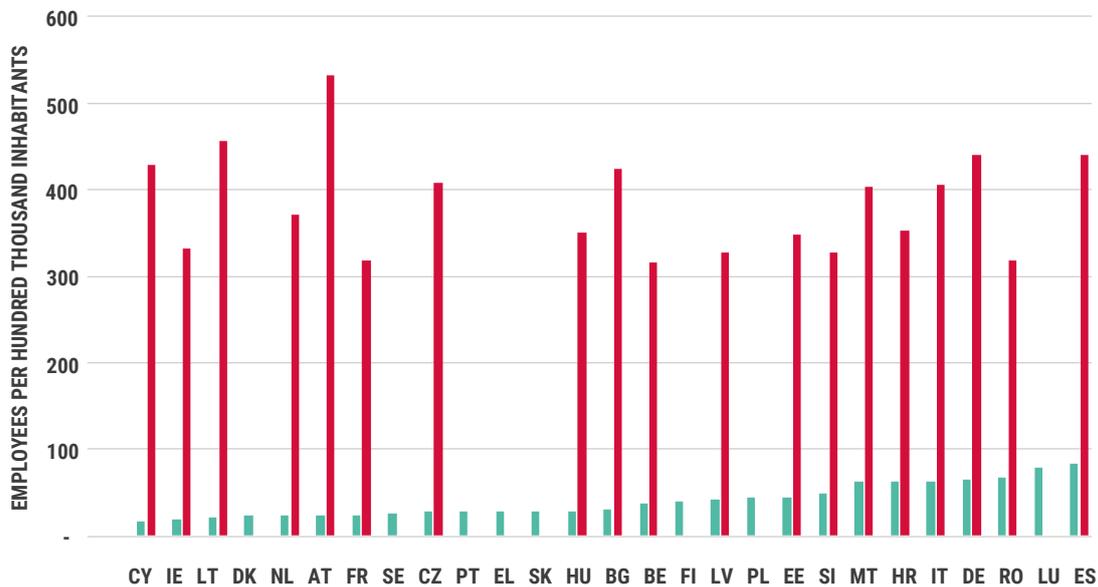


FIGURE 7: ADDITIONAL STAFF NEEDS IN MUNICIPALITIES FOR BUILDINGS' DECARBONISATION PER YEAR (IN MINT) COMPARED TO NUMBER OF MEDICAL DOCTORS (IN RED)²²

19 Source: own calculations based on Eurostat. See the [methodology note](#).
 20 Source: Statistisches Bundesamt, [Personnel in Public Services in 2020](#)
 21 Including pharmacists and dentists but excluding nursing and caring professionals
 22 Source: own calculations and Eurostat – when data are available



214,000 ADDITIONAL EMPLOYEES AND A WIDE VARIETY OF PROFILES

Cities will need a wide variety of profiles to perform the different tasks to unlock the building decarbonisation. These will include:

- » Around **23,000 energy analysts** able to design heating plans. They analyse energy consumption of buildings, the potential for renewable energies and develop transition scenarios by comparing feasibilities and costs of different technologies; they also monitor the progress of the implementation of the heating strategies.
- » Around **105,000 employees** for the direct implementation of the heating strategies. For example, **project managers, urban developers, engineers** who will tender or perform feasibility studies of energy infrastructures (like neighbourhood heating and cooling systems, geothermal or solar thermal plants), and issue procurements for the development of the latter. They issue permits, design adequate
- » policies, and provide financial schemes to households. They are also **experts in citizen engagement and decision-making process** to convince different stakeholders to constantly update and implement the neighbourhood heating strategies.
- » Around **40,000 energy advisers and communication officers** with technical and social skills to raise citizens' awareness and guide them through the process of decarbonising their homes. It includes launching massive communication campaigns and providing neutral and transparent advice on the technical solutions, the steps to take, and the incentives available.
- » **40,000 employees** who will specifically support the **social housing sector, the non-residential sector (businesses), housing corporations and owners' associations** to also decarbonise their building stocks.
- » Finally, **6,000 civil servants** to decarbonise the **public sector's buildings**.



INVESTING IN LOCAL STAFF: A MUST-DO WHICH BENEFITS THE ENTIRE ECONOMY

BUILDING DECARBONISATION: TO BE PUBLIC AND LOCAL... OR NOT TO BE?

The decarbonisation of buildings and heating solutions is inherently local²³. Understanding the potential for renewable and waste heating can only be meaningful if done at the local level. Moreover, reducing the heating demands of buildings implies an engagement with citizens and providing them the necessary support to go through the different steps of a building renovation and access subsidies and finance. The question of trust is central in this process, and people are much more willing to engage if they see other people from their communities doing so and can trust the people who support them. This is why cities have created one-stop-shops (OSS) which are non-profit actors, offering advice and support in a neutral and transparent way allowing citizens to retrofit their buildings. Building decarbonisation therefore requires a strong engagement with public actors, and thus civil servants.

The development of accessible and efficient local public services is the best way to quickly achieve this transformation. The exact way these services should be delivered should be fine-tuned according to national and local contexts. Indeed,

resources do not always have to be offered at the municipal level but can be shared by a group of municipalities and some actions may be delegated to local or regional energy agencies. However, neighbourhood heating plans cannot be drafted at the national or regional levels, and market forces will not provide for the necessary changes. Households and businesses are turning to local governments to get local and accessible technical assistance to decarbonise their buildings, overcome the numerous barriers and face **current energy prices**.

Private actors are unable to address, in a credible way, the decarbonisation of buildings while taking into consideration the societal perspectives, local contexts, and available resources. It requires transparency to create trust, the capacity to engage all local stakeholders and citizens in the long run, and a democratic framework to legitimate political choices. Private actors prevent civil servants and the whole municipal administration from taking ownership of the work they develop, while the recent crises have **shown us the importance of having civil servants in the face crises, especially when those seem to be more and more frequent**.

LONG-TERM AND INTERNAL POSITIONS IN MUNICIPALITIES ARE KEY FOR CONSISTENT AND LONG-TERM ACTIONS

Decarbonising buildings is both a sprint and a marathon. It should start now and be scaled as soon as possible. On the other hand, as the example of Delft described in Box 2 shows, this marathon and several actions will have to be repeated dozens of times for different

neighbourhoods. Thus, **in this process, it is key to ensure learning beginning with the first phases and therefore hire staff for the long-term. Integrating this learning is also the best way to be more efficient and thereby reduce the future costs of these actions.**

²³ See also [Why and how fossil fuels in buildings will be history by 2050](#), Energy Cities, 2021



VOICES FROM CITIES: DELFT & HEERLEN (NL)

The Energy Transition programme of the city of Delft (100,000 inhabitants) includes an awareness campaign, the development of a local energy and heating strategy, the contribution to the Regional Energy Strategy, the assessment of different technologies, and the creation of neighbourhood plans. The “Delft Goes Green” campaign targets inhabitants, businesses, social housing, and real estate companies. To carry out all the decarbonisation actions, the energy transition team grew from 3 FTE in 2019 to 12 FTE in 2021 (+9 FTE). However, the city has not yet started the implementation phase of the neighbourhood approach: the municipal team has designed the action plans for the first neighbourhoods and their implementation will start in 2023. Until 2030, the process will have to be

repeated for 10 to 15 other neighbourhoods. According to the study above, a city like Delft would need an average of 25 more additional FTE in 2030 compared to 2019. For more information, watch the presentation by the city of Delft at the Energy Lunch Talk in March 2022 [here](#).

The city of Heerlen (90,000 inhabitants) is the economic centre of a conurbation of eight municipalities (250,000 inhabitants) in the southern part of the province of Limburg in the Netherlands. They currently have 5 FTE working on the buildings’ decarbonisation, and the design of the first neighbourhood plans, but they estimate that they will need 48 FTE to achieve the transition.

BOX 2: STAFF NEEDS OF DUTCH MUNICIPALITIES

National governments often fail to provide this long-term visibility regarding funding to local governments, which is particularly needed in the energy and building sectors due to the long lifecycles of investments. For instance, the Dutch national government established a fund to support certain cities wishing to create job positions to

draft their heating strategies. However, cities shared their uncertainty about the availability of funds to employ the appropriate staff and invest in the projects. In addition, those fundings are often temporary solutions and do not allow a long-term, sustainable workforce to be created, as detailed in Box 3.

THE GERMAN KOMMUNALRICHTLINIE INITIATIVE

Aware of the key role to be played by local authorities in the ecological and energy transitions, the German federal government has established a funding programme for local authorities, the Kommunalrichtlinie. This two-year programme unlocks funding to allow local authorities to hire one FTE to work on questions related to the transition, including energy and environment management questions.

While this programme offers a temporary solution to the lack of funding, it does not secure long-term employment, as the two-year contracts cannot be automatically renewed. Municipalities must repeat the entire process to be able to keep their employee, this results in more work to do while remaining short-staffed. However, this can be seen as a good temporary solution, while looking for alternative funding or other potential investments.

BOX 3: THE GERMAN EXPERIENCE



Partially due to the lack of long-term financial resources and internal expertise, many of the required tasks to decarbonise buildings are subcontracted to private companies or consultancies. According to the initial results of the Energy Cities' survey²⁴, the vast majority of responding cities rely on external studies to support them in decarbonising their built environment. In terms of costs, at the time of writing²⁵, 75% of the respondents have commissioned external studies to carry out those tasks. Among them, 56% spend more on external studies than what would amount to the yearly salary

of an employee to carry out similar tasks internally. As shown in Figure 8, more than 50% of local governments responding to the survey are spending more than what an FTE would cost in external studies, which demonstrates that the internal resources are lacking. If it is the routine practice that cities subcontract missing expertise, over-developed subcontracting raises questions regarding internal skills and knowledge needed to ensure the capitalisation of learning and consistency of actions which will be needed in the long-term.

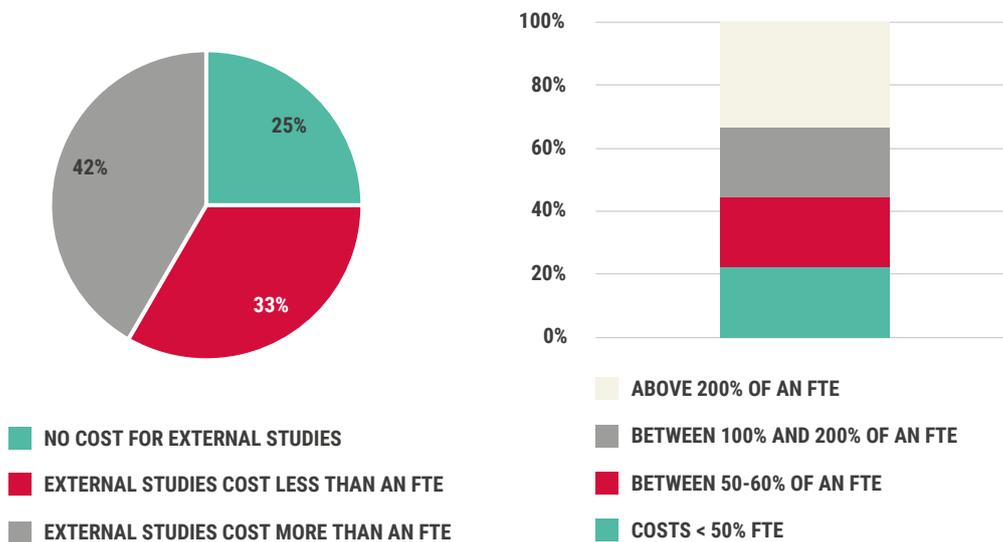


FIGURE 8: SHARE OF EXTERNAL STUDIES IN LOCAL AUTHORITIES COMPARED TO AN FTE COST

STAFFING LOCAL GOVERNMENTS IS AN INVESTMENT WHICH PAYS OFF

The investment in local staff capacity will unlock the decarbonisation of the built environment, creating thousands of jobs across the EU. Of course, technical assistance by public civil servants will directly benefit households, giving them the ability to retrofit their home and lower their energy bills.

But it will also benefit businesses and companies. For instance, in the Baden Wurttemberg region (Germany), the legislation enforcing mandatory heating plans by local governments is expecting to boost the creation of DHC systems, thus benefiting businesses (especially the energy utilities)²⁶.

²⁴ Cf.: p.12
²⁵ April 2022 – Answers from 28 cities
²⁶ Source: *Hot Cool n°4*, 2020



The existing, but often too limited, technical assistance programmes for local governments, such as the ELENA programme from the EIB, the Project Development Assistance calls, and the European city facility, financed by the H2020 and LIFE programmes, clearly show the multiplication effect of investment in human capacities. The minimum leverage factor requested (between the grant allocated and the investment triggered) is typically a factor of 20 but is often higher once the projects are implemented.

Another example of the clear effectiveness of support by local governments to unlock the buildings' decarbonisation is the One Stop Shop (OSS), which lessens the burden of the

renovation process on households. For instance, the ORFEE project is developing third-party financing companies, and offering project design and technical assistance services during the implementation of renovation works, which can be aided by a financing offer. These public or public-private entities have created, for the year 2021, work investments of €29,3M. The support for each project required an of average 10 working days for a cost of 8 730€, but unlocked an investment of 45 000€ per project, i.e., having a multiplication effect of 5²⁷.

The city of Valencia has also been exploring the OSS as a way of creating investments in the city in order to renovate buildings. Box 4 below describes the city's experience.

VOICES FROM CITIES: VALENCIA (ES)

In Valencia, the municipality used the project Save the Homes to estimate the resources needed to expand one-stop-shops to promote and support the renovation of private residential buildings. The city has a goal of creating 4,913 additional refurbishment projects by 2030. According to calculations, the average cost per project would be €12,000, allowing for a total investment of around €58,956,000. The total personnel costs would grow from €214,500 in 2022 to €351,000 in 2029. In terms of FTEs, this represents a slight increase from 5 in 2022 to 8 in 2029, unfolding as follows:

	2022	2023	2024	2025	2026	2027	2028	2029
PROGRAMME MANAGER	1	1	1	1	1	1	1	1
COMMERCIAL / SOCIAL	2	3	3	3	3	3	3	3
ADMINISTRATIVE	1	1	1	1	1	1	1	1
TECHNICAL	1	2	2	2	2	2	3	3
TOTAL	5	7	7	7	7	7	8	8

Valencia plans to rely on three different subsidies: a federal subsidy established by the Royal Decree 853/2021 regulating subsidy programmes for housing rehabilitation for the period 2022-2026, as well as regional and local subsidies for the entire period. By using these subsidies and building on the knowledge and skills gained, the cost per rehabilitated house is expected to decrease by almost 60% over the 2022-2029 period.

BOX 4: THE SPANISH EXPERIENCE

²⁷ Source: *Sociétés de tiers-financement mode d'emploi*, ORFEE, April 2022



THE DIFFICULTY TO ATTRACT THE RIGHT CANDIDATES: THE NEED FOR BETTER SALARIES AND EMPLOYER BRANDING

"MY PROBLEM AT THE MOMENT IS THAT EVEN THOUGH I HAVE THE BUDGET NECESSARY TO EMPLOY THE WORKFORCE TO CARRY OUT ALL THESE TASKS, I DO NOT HAVE ENOUGH CANDIDATES TO FILL THESE POSITIONS."

This quote from an elected representative from Delft is not an isolated case. Frequently, in discussions with members of the Energy Cities' extended network, the question of finding the right people, with the skills and willingness to work for a public administration, arises.

ALIGNING SALARIES OF LOCAL PUBLIC SERVANTS WITH THEIR IMPORTANCE IN ACHIEVING CLIMATE-NEUTRALITY

The question of salaries, which are often seen as not competitive, when compared to the private sector, is key for municipalities to attract the right candidates and, more importantly, keep them in the long term. As shown in Figure 9, for the majority of EU countries, the average wages earned in public administration are lower than in the rest of the economy.

This is particularly noticeable in Bulgaria (- 34%) and Germany (- 26%). Employees in public administrations are better paid than in other sectors – all other variables being equal – in four Member States only: Spain and the Netherlands (+4% for both), Romania (+22%) and Luxembourg (+44%).

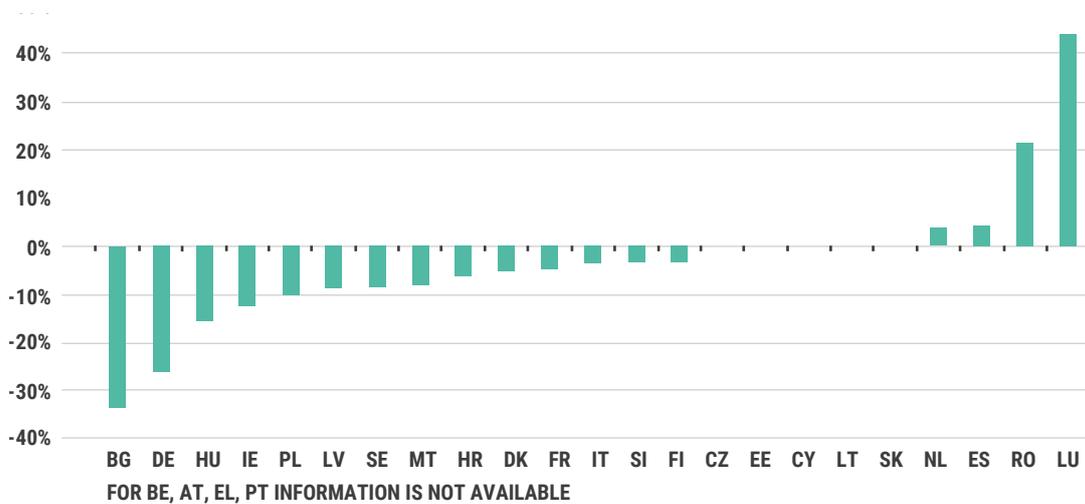


FIGURE 9: FINANCIAL RETURNS FOR WORKING IN PUBLIC ADMINISTRATION VERSUS OTHER ACTIVITIES²⁸

²⁸ Source: *Wages determinants in the European Union, Eurostat*



RECONSIDERING LOCAL PUBLIC ACTIVITIES BY DEVELOPING STRONGER EMPLOYER BRANDING

To be able to attract the right people means local governments must be viewed as attractive employers. A recent study in France²⁹ surveyed more than 200 employees involved in communication and / or human resources in local governments on the question of their employer branding. This concept refers, in communication, to the image an organisation wants to reflect in order to attract candidates and make sure that they secure long term employment. It applies both internally and externally.

The responses were almost unanimous: 97% of them stating that local governments need a real employer branding, which appears to be a legitimate concern. However, this currently remains a real goal for slightly less than 50% of them in France. The issue of local governments being viewed as an attractive employer is a recent one. It has been tackled by the French national government through the launch of an online platform, “*Choosing the public service*”. The platform gives reasons why

a prospective employee should choose to work for the public service, and gathers job offers, and testimonies from actual public servants. It does not specifically target local governments, but it does include them. However, local governments should create their own employer brands, as suggested by the High Council for Local Civil Service (Conseil supérieur de la FPT) and the Association for Human Resources in Large Territorial Authorities (Association des DRH des grandes collectivités).

Figure 10³⁰ shows the strategies chosen by most of the territorial governments to attract workers. They often utilise the image of the territory and the institution itself, while the last element put forward is the valorisation of the jobs linked to those institutions. However, the attractiveness of a workplace, of a brand, relies on shared values and the valorisation of the jobs and missions carried out.

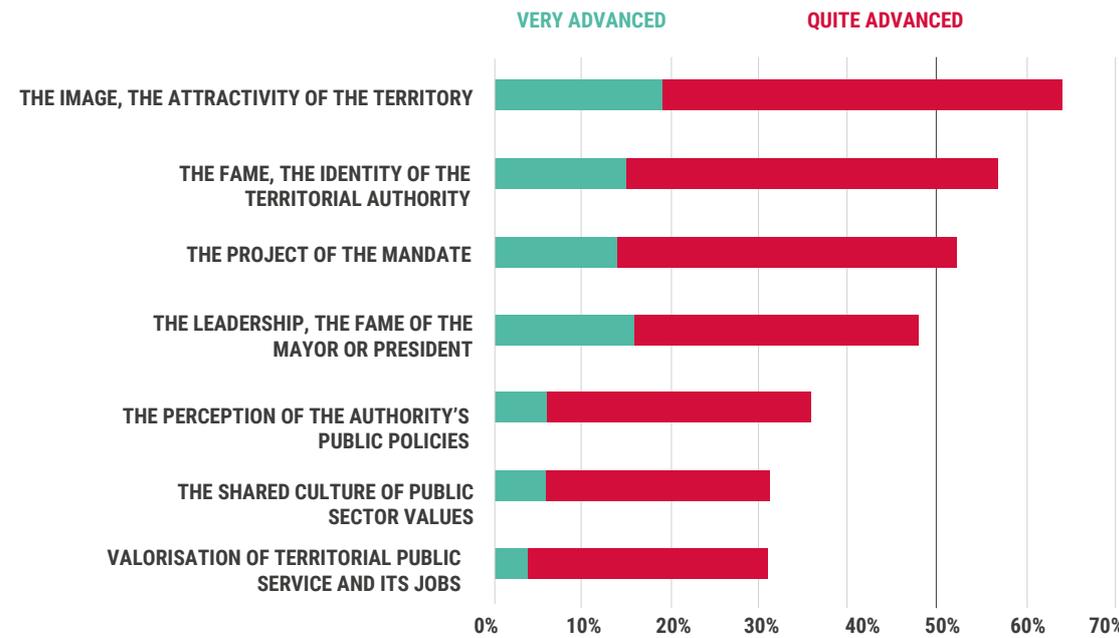


FIGURE 10: ARGUMENTS PUT FORWARD BY TERRITORIAL AUTHORITIES TO ATTRACT WORKERS

29 Occurrence et Cap'Com, La marque employeur au sein des collectivités territoriales, February 2022
 30 Source: *ibid.*



Recently, public authorities, including local governments, have had to prove that they are delivering and focused on communicating their worth. This has been reinforced by the criticism often made by citizens, and even by some politicians, regarding the portion of the budgets represented by public sector, with criticism also being addressed as to the efficiency of the tasks carried out.

To increase the attractiveness of working for local governments necessitates the involvement of everyone, from those working in communications elected representatives, managers, heads of departments, etc... According to the results of the study by Cap'Com and Occurrence, in France, civil servants are willing to work for a municipality because they recognise and share the values embodied by the mayor and their team. We submitted this idea to our network, and it has been widely confirmed.

This is what a representative of a local energy agency in Italy declared, although this is more of an exception than the rule:

"I TRIED WORKING FOR THE PRIVATE SECTOR IN THE PAST BUT I DID NOT FEEL LIKE I WAS CONTRIBUTING TO SOCIETY. DESPITE A HIGHER SALARY IN THE PRIVATE SECTOR, I FEEL MORE COMFORTABLE WITH THE ETHICS OF THE PUBLIC SECTOR - PARTICIPATING IN A BETTER ENVIRONMENT FOR FUTURE GENERATIONS"

In the end, the majority (57%) of those responding to the survey carried out by Cap'Com and Occurrence plan to develop an employer brand strategy during the next three years, in order to assist with increasing the attractiveness of the territorial governments. This aspect, even if not at the forefront of

decarbonising the built environment, will also be key. If local governments do not manage to be seen as attractive employers again, they will face a hard time in recruiting the staff they need to carry out the necessary tasks.



RECOMMENDATIONS: HOW TO CREATE 214,000 ADDITIONAL POSITIONS?

Local governments need about 8 years to develop and implement a building decarbonisation plan in each neighbourhood. Member States and the European Commission must very quickly provide long-term funding and resources to give cities time to think, learn, develop, and implement their plans.

So how can 214,000 additional positions in the EU local governments be financed? The answer lies in the reallocation and creation of dedicated European and national funds, the collaboration between local governments, the development of a proper

local Human Resources (HR) strategy for the building transition, and the empowerment of cities in the management of their budgets and staff expenditures.

We propose **10 concrete action points** to develop the local workforce for the building but also the ecological transition in general. These recommendations shall be taken up by local and regional governments, Member States, and the European Union: ★ EU level 🇪🇺 Member States 🏠 Local authorities

#1 PROVIDE FUNDING AND ENCOURAGE LOCAL COOPERATION

REALLOCATE BUDGET TO FINANCE LOCAL EMPLOYMENT POSITIONS

01



An average of 16 billion EUR per year is quite a small budget for all 27 Member States (even if it is uneven depending on Member States), but local and regional governments cannot be solely responsible for financing it. By reallocating some funds from their national budgets, Member States can finance these positions. It is also a key investment in developing the economy and employment in the territories. The EU should support this effort by redirecting certain funds, such as the Recovery and Resilience Funds, blending instruments like the ESF+, ERDF, Erasmus or InvestEU, reforming the European Semester, and adapting the future Multiannual Financial Framework (MFF) to make them more city-budget friendly. The European Commission can also use its Technical Support Instrument (TSI) to foster governance reforms in Member States in order to strengthen the staffing of local governments and move toward more decentralization.

ENCOURAGE THE LOCAL OR REGIONAL COORDINATION TO POOL LOCAL WORKFORCES

02



Local and regional governments can pool their expertise by pooling their resources to finance one Full Time Equivalent position³¹. This solution should be adapted to the geographical context and needs of cities. This will allow economies of scale and enable the exploration of further synergies between territories. It is especially true for rural and urban areas which can find complementary expertise and interests. Member States should provide adequate frameworks to ease the coordination of subnational governments on this matter and encourage the solidarity of bigger local governments in sharing their expertise with smaller ones.

³¹ Also highlighted in the study AFL & INET. *Comment financer la transition dans les collectivités locales*, 2021 (available in French).



SHARE EXTENSIVELY LOCAL BEST PRACTICES IN THE MATTER

03



Solutions often come from the cities themselves in order to find administrative, organisational, and budgetary tricks to finance their staff capacity needs. It is therefore necessary to offer them a European or national space for sharing best practices. This can be done within the Covenant of Mayors and within the Mission cities³².

#2 DEVELOP A HUMAN RESOURCES STRATEGY FOR THE LOCAL WORKFORCE

ASSESS THE STAFFING NEEDS OF EACH SUBNATIONAL GOVERNMENT

04



To complement this analysis at an aggregated, EU level, Member States should launch in-depth studies to assess the real needs of local civil servants for the energy transition. Local governments can also map their future staffing needs, based on the list of actions set forth in the Dutch study and cited in this publication, in order to mobilise their national government on the issue. Having clear and precise numbers will ensure a correct anticipation of the needs and creation of cost-efficient solutions.

DEVELOP PLANS TO ATTRACT AND FACILITATE RECRUITMENT TO LOCAL OR REGIONAL ADMINISTRATIONS AND THEIR BODIES

05



The EU Commission and its representatives in Member States should develop guidelines and best practices for Member States to facilitate the recruitment of skilled staff at the local level. Member States should reform working conditions (salaries, benefits, working environment) and to make civil servants job positions more attractive. The Technical Support Instrument (TSI) provided by the European Commission can also help in these changes. Making local energy transition jobs visible and attractive will require a collective effort. Local and regional governments and their bodies must improve their “employer brand”.

³² EU Mission cities is a [program](#) under Horizon Europe which aims at delivering 100 climate neutral and smart cities by 2030 and ensure an experience haring for all European cities to follow by 2050.



PROVIDE TRAINING TO CLIMATE AND ENERGY STAFF

06



Training will be necessary for staff that local or regional governments may decide to reassign to internal climate and energy positions. Additionally, staff will also need training and upskilling, as they will be required to use new tools and methodologies to carry out the transition. National or regional energy agencies with the relevant knowledge can lead these training programs. The European Union can develop programmes such as the Civil Servant Exchange Programme, which encourages civil servant exchange between countries, similar to the Erasmus programme. Civil servants of subnational governments should have access to the programme and it should focus on recruitment solutions within local government administrations.

SHARE EXTENSIVELY LOCAL BEST PRACTICES IN THE MATTER

07



Member States and the European Union may need to rethink the technical and academic training they offer and ensure their priorities meet the demands of the labour market³³.

#3 ENABLE LOCAL AND REGIONAL GOVERNMENTS TO DEVELOP THEIR OWN GREEN BUDGETS AND WORKFORCE

RETHINK BUDGET ORGANIZATION WITHIN CITIES TO BOOST ENERGY AND CLIMATE EXPENDITURES

08



Local and regional governments should have long term perspectives on their budget to ensure more visibility, and plan and invest better in the required workforce. To that end, we support the recommendations already made by the French Local Agency and the French National Institute for Territorial Studies³⁴, regarding extending the funding period of certain EU or national calls for projects to better meet local ambition and planification needs³⁵. These longer term calls for projects must also be able to sustainably finance job positions linked to the project activities. National governments should also provide long term perspectives for the local and regional governments' budgets. Within cities, it is also necessary to analyse the climate impact of the budget³⁶, and to reprioritise expenses related to activities that have the greatest impact on the climate.

³³ In France, a [study](#) from the think-tank the Shift Project showed that, among 34 universities and higher education schools, only 11% of the compulsory lessons include climate and energy topics.

³⁴ AFL & INET. [Comment financer la transition dans les collectivités locales](#), 2021.

³⁵ The SHIFT project, *La Résilience des territoires*, Tome III – Organiser, September 2021

³⁶ I4CE, [Climate assessment of local authority budgets: methodological guide](#), 2020



REMOVE REGULATORY BARRIERS TO FACILITATE ENERGY AND CLIMATE INVESTMENTS, IN PARTICULAR INVESTMENTS IN HUMAN RESOURCES

09



The EU and Member States must facilitate the investment of cities in any type of expenditure related to the ecological transition. Indeed, the risks of climate change for cities, highlighted by the latest IPCC report³⁷, are far greater than the risks of any related investment and/or indebtedness. The European Commission should review the Stability and Growth Pact, with this in mind. In addition, the operating expenses of local governments linked to the ecological transition, like HR expenditure, should not be subject to the same strict rules limiting budget increases and related borrowing.

★ EU LEVEL
 🇪🇺 MEMBER STATES
 🏠 LOCAL AUTHORITIES

EMPOWER CITIES VIA LOCAL ENVIRONMENTAL TAXES

10



To develop their autonomy in the management of their budgets and especially in the investment in human capital, local and regional governments must be enabled to levy local environmental taxes. The EU and the Member States can propose an adequate framework.

GET INVOLVED!

- » Do you want to get involved and work with Energy Cities and its partners in a campaign to call for the recruitment of more local staff for the energy transition?
- » Check out the Local Staff for Climate campaign's [website](#) where you can sign the [manifesto](#) and get in touch with us!



ENERGYCITIES

www.energy-cities.eu

 [@energycities](https://twitter.com/energycities)

 [@energycities.eu](https://www.facebook.com/energycities.eu)

BESANÇON

2 chemin de Palente
25000 Besançon, France

BRUSSELS

Mundo Madou
Avenue des Arts 7-8
1210 Brussels, Belgium