



## Local authorities and climate action

The energy and mobility transitions  
in cities and municipalities

Who is responsible? Interview with Marianna Roscher

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# Act local

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Think global, act local: you've probably heard the phrase a thousand times – perhaps because there is some truth to it, especially in relation to climate change. The fact is that we will not reach our targets by crafting international agreements and then failing to insulate our homes and expand the public transport systems in our own localities.

To avoid any misunderstandings: I am not trying to shift the bulk of the responsibility to the local authorities. Clearly, we need to have the right frameworks in place at the national and international levels. Many local authorities are justifiably frustrated when the road traffic regulations restrict their scope for action in transport planning. And yet despite all the obstacles, which we certainly do not sidestep in this issue, the local authorities have countless opportunities to make a difference in how they plan and manage their cities – whether it's in public procurement, the energy supply, or designing the cycling and walking infrastructure.

Municipal climate action offers many more practical and tangible benefits for local citizens. Air quality improves, noise levels in our cities and municipalities decrease and quality of urban life is enhanced if our public spaces are green and social, rather than gridlocked and lined with cars. This creates a stronger sense of agency and engagement for the climate. Of course, municipal climate action comes with challenges – especially when budgets are tight. But compared with policy-making at the federal level, where decision-making is far more cumbersome, much can be achieved in a shorter timeframe here.

Speaking personally, I am always happy to see my local authority – and there have been several over the years – taking the initiative on the energy and mobility transitions. I am grateful that it has shortened journeys, introduced speed limits and provided an efficient local public transport and cycling infrastructure, which means that I have never had to buy a car. The intermeshing of measures is crucial in ensuring that workplaces, schools and hospitals are within easy reach by car-free transport and that carbon-free mobility is becoming a genuine option for many of us. Climate action in the building sector requires a complex package of measures at the municipal level as well. Municipal heat planning, roof-mounted photovoltaic systems and the recycling of construction materials, particularly for public buildings, should be examples of best practice, along with support for local trades aimed at reducing the skills gap in refurbishment and heat pump installation.

It is a complex challenge – but one which our cities and municipalities can master if they are given adequate support

Yours,  
Jan Peter Schemmel

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# “The scope for action is limited”

**Downtown Bottrop probably faces mitigation challenges that differ from those existing in east Leipzig. Nevertheless, all the German municipalities must confront the task of reducing their greenhouse gas emissions. Where do our cities and municipalities stand on climate change mitigation? And how can they be given more effective support? We put these questions to Marianna Roscher, who heads the Building, Housing, Climate Action and Adaptation Unit at the German Association of Towns and Municipalities. She explains why local authorities often have limited scope for action and what kind of changes to funding criteria are required.**

## **Marianna Roscher, where does municipal climate action stand at present?**

There's no easy answer to that because the German local authorities come in all shapes and sizes and have diverse strengths and challenges. So the progress that cities and municipalities have made in the different fields also varies. Some are leading the way on transport, while others are ahead of the game on refurbishment of the building stock or are already working on heat planning. There are some excellent examples that we can learn from. I'm thinking of the village of Feldheim in Brandenburg, which is self-sufficient in energy with its own electricity and heat network and solar power plant, among other things. It must be said, though, that when it comes to climate action, no one has crossed the finishing line yet. That's why we need a good overview of the areas of action being addressed at the local level.

## **Could you say a little more about the status quo?**

The simple fact is that in many areas, progress is too slow. And it very much depends on the financial and human

resources that are available to the local authority. On top of that, many cities and municipalities have been – and still are – preoccupied with other issues, such as mitigating the impacts of the COVID-19 pandemic and providing accommodation for refugees.

## **Should the federal government make climate action mandatory for local authorities?**

Who is responsible for protecting the climate? That's the fundamental question. What action should national government take? What about the local authorities and private citizens – what should they be doing? There are no clear rules on this at present. What we need is a basic consensus on the division of responsibilities between the federal government, the German states and the local authorities, along with appropriate policy frameworks.

## **Could you elaborate?**

In many areas, the local authorities' scope for action is very limited by the legal frameworks, for example. If an authority wants to implement a water conservation strategy, it will need some limited access to properties. But facilitating this can be a very complex and lengthy process. Similar problems can arise with municipal heat planning.

## **What are the most important mechanisms for more municipal climate action?**

We should be starting with those that yield the highest emission reductions. Here, we need to look at buildings; that includes real estate owned by the local authorities. Municipal heat planning and refurbishment have a key role to play. Another important question is where the local authorities are actually able to influence climate action to an adequate extent – this is evident from the opportunities for access, which I

have just mentioned. And recruiting climate action managers is certainly very important.

## **What is the most urgent task that they need to address?**

Securing funding. The feedback that we often receive is that simply applying for and accessing funding absorbs too much capacity in the cities and municipalities. It ties up staff resources, which are often in short supply already.

## **How can and should local authorities be supported in their climate action?**

First and foremost, the federal and state governments should provide financial resources. The funding criteria need to be simplified at the same time so that interventions can be carried out more swiftly, more efficiently and with a stronger focus on results. For example, the disbursement of funds should not fail simply because an invoice for a double-digit figure can't be produced. From our perspective, it would also be sensible to remove the time limit on the funding of climate action managers. Climate change mitigation is a long-term task, so it is not particularly helpful to be constantly losing know-how here. And of course, municipal climate action relies on good cooperation with local citizens. We must all learn to push the boundaries of our comfort zones.

## **Thank you for talking to eco@work.**

The interviewer was Christiane Weihe.



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# Municipal climate action

## Status quo and challenges

**Buses? Electric! Buildings? Refurbished to the highest standards! Cities and municipalities can make a major contribution to mitigating climate change – by providing advice to local residents and undertaking energy upgrading of their building stock, for example, or by putting municipal enterprises such as transport providers and local utilities on a path towards climate neutrality. Many local authorities are already actively committed to mitigating climate change. But there is still major potential to unlock – reflecting the major challenges facing our cities and municipalities.**

“Local authorities have a great deal of scope that they can and should be utilising more effectively,” says Jonathan Schreiber, a researcher at the Oeko-Institut. “They have a very large workforce, they are influential in municipal enterprises, and they have a building stock and, often, their own vehicle fleets.”

And many local authorities are already taking action to protect the climate. “There is a high proportion of e-vehicle registrations in some local authorities, while others are working to improve the cycling infrastructure.” It is a similar picture in the energy sector. “There is quite a lot of movement on municipal heat planning and the switch to renewables, for example,” says Tanja Kenkmann, a Senior Researcher in the Energy and Climate Division. But this is certainly not enough, as she makes clear. “Many cities and municipalities have set ambitious climate targets in recent years, but despite all their policies and strategies, many of them are finding it difficult to achieve these goals.”

So why is municipal climate action such a challenge? One reason is that municipalities take many forms. “German cities and municipalities are incredibly diverse. They vary in size, some are urban and some are rural, and the frameworks

in which they operate differ according to the legislation in place at the regional-state (Land) level,” says mobility expert Jonathan Schreiber. Take municipal heat planning: “In Baden-Württemberg, the major county towns and unitary authorities are required to produce a heat plan by the end of 2023. It’s a positive step – one which Hamburg and Thuringia have also taken, for example. Ideally, all of Germany’s states should follow suit,” says Tanja Kenkmann.

In the Oeko-Institut researchers’ view, many local authorities are still poorly equipped to implement effective climate strategies. “Climate change mitigation is a cross-sectoral task that involves various departments and agencies,” says Jonathan Schreiber. “The existing administrative structures are not designed to accommodate this, as a rule.” In addition, much-needed skills are often in short supply. “Cycling, for example, has played a subordinate role in transport planning and related training for decades.”

There are many other challenges to overcome as well – notably as regards climate change adaptation and biodiversity. But a lack of staff is another factor causing headaches for local authorities. “The skills shortage is hitting local authorities hard. On top of that, financial constraints often make it impossible to appoint climate action managers, for example, who would coordinate and progress climate change mitigation within the local authority. What we are seeing is that even when funding for climate action is available, it is not being accessed, simply due to a lack of personnel,” say Senior Researcher Tanja Kenkmann. And staff are needed for other climate-related tasks as well. “Refurbishment of buildings is just one example: planning, delivering and overseeing projects of this kind is a very time-consuming process.”



## STRENGTHENING LOCAL OWNERSHIP

Legislation in place at the federal level can also have a dampening effect on municipal climate action. "For example, the road traffic regulations hamper cities and municipalities from taking their own decisions on where to introduce a 30 km/h speed limit. And yet depending on traffic flows, this would reduce emissions and improve safety for large numbers of road users," says Jonathan Schreiber. "And although the German government's coalition agreement aims to give local authorities more leeway in relation to road transport, there has been no movement on this issue yet. A reform of the road traffic regulations is therefore urgently required. The local authorities should be given far more scope for action here. They have a better insight into what would be useful and necessary within their sphere of governance." It seems that many local authorities agree: via the Liveable Cities and Communities initiative, more than 500 of them are currently pushing for more decision-making powers. However, other rules – such as the mandatory provision of parking spaces, set out in the building regulations – also hinder more sustainable mobility in almost all the German states. "This conflicts with the vision of car-free urban centres."

Barriers exist in the energy sector as well. "For example, a ban on gas- and oil-fired heating could have been introduced long ago. In our view, this is taking far too long," says Tanja Kenkmann. "And then there is the refurbishment of buildings: here, the state-owned KfW bank funded low standards for too long. Thankfully, that has now changed, but a great deal of potential was squandered here."

## MORE TRANSPARENCY

A current project outlines another approach to chart progress in municipal climate action: sustainability reporting. As part of the Implementing the 2030 Agenda Locally through Urban Development



project on behalf of the German Federal Institute for Research on Building, Urban Affairs and Spatial Development, the Oeko-Institut and EBP Deutschland GmbH are assisting eight local authorities in Germany and around the world – including Cottbus, Munich, Mannheim, Liverpool City Region and Prefeitura Municipal de Maringá in Brazil – to draw up sustainability reports. "We want to facilitate an international dialogue so that the local authorities can benefit from a diverse range of experience," Jonathan Schreiber explains. The reports will be based on the Sustainable Development Goals (SDGs) adopted by the United Nations. Goal 11 focuses on making cities and human settlements sustainable. Today, around half of the world's population lives in cities, and this is likely to increase to two-thirds by 2050. "The 2030 Agenda encourages sustainability reporting at the national level, but local authorities are increasingly engaging here as well," says Jonathan Schreiber.

According to the experts, sustainability reporting offers numerous benefits for local authorities. "Transparency, for example: the local authorities can see where they stand, how much progress they are making and how they can contribute

to sustainability targets – and communicate this to local citizens." They also see this as a highly prestigious form of engagement. "It creates an opportunity to be influential in national and international processes and thus actively respond to challenges at the municipal level." The process of producing a sustainability report strengthens collaboration within the local authority, says Tanja Kenkmann. "And this is essential for mitigating climate change, which concerns every sector."

As the first step, the researchers asked the participating cities about the status quo and their goals and challenges. "We found that most local authorities view climate action as a core issue. According to the urban municipalities that are involved in the project, the challenges mainly arise when they have to reconcile a variety of trends and pressures, including demographic change and population growth in some cities, but also a lack of human and financial resources."

There is no shortage of challenges, in other words. But what about solutions?

*Christiane Weihe*





# A model for



## Solutions for more municipal climate action

There are many solutions – and many areas where action is needed. That is the nature of climate change. Here, the local authorities can start out on the journey, learn from other cities and municipalities, and set priorities – and above all, build on strategies that have already been successful elsewhere and have particularly high impact potential. What are these strategies? The Oeko-Institut is working on various projects that aim to answer that question.



the future



By implementing 38 measures, the German municipalities can reduce greenhouse gas emissions by around 101 million tonnes of CO<sub>2</sub>e, according to a new study entitled “Municipal potential for influencing greenhouse gas mitigation: how municipal measures can contribute to national climate action” on behalf of the German Federal Ministry for Economic Affairs and Climate Action (BMWK). The joint project by the Oeko-Institut, the Institute for Energy and Environmental Research (ifeu), the Research Institute for Regional and Urban Development (ILS) and SCS Hohmeyer GmbH identifies the impact potential of a range of instruments in various areas of influence. For example, expansion of the cycling infrastructure and an obligation to connect to and use decarbonised district heating in existing buildings would lead to annual emission reductions of 5 million and 8 million tonnes CO<sub>2</sub>e respectively and would thus have a major impact on the GHG balance.

But which enabling conditions must be in place for the measures to be actioned? The researchers make various recommendations in their study. “Here,

it is important to define obligatory mitigation tasks and ensure that the local authorities have adequate financial resources available,” says Senior Researcher Tanja Kenkmann. “These resources are needed to pay the relevant staff. Climate action managers have a key role to play: they plan and facilitate the actions to be taken and thus enable existing mitigation potential to be leveraged.” Jonathan Schreiber, a researcher in the Resources and Transport Division, emphasises the importance of networking and a more integrated approach. “This allows various thematic areas to be addressed – expanding local public transport, promoting electric vehicles and devising ways to avoid unnecessary travel – rather than focusing on individual aspects.”

From the research team’s perspective, it is also sensible to integrate municipal enterprises into the climate strategy, embed climate action more firmly in federal and regional-state law, and introduce mandatory climate reporting, among other things. “But the local authorities can’t take on all these tasks on their own,” says Tanja Kenkmann. “We need broad-scale support struc-

tures and adequate financing. And that includes developing and expanding funding programmes.” Guidelines produced within the project framework provide practical support for local authorities’ climate action efforts: “They include a seven-point strategic plan setting out the key steps.”

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**MUNICIPAL HEAT PLANNING**  
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The Oeko-Institut investigated one of the core measures for more climate action – municipal heat planning – in the project “The heat transition: The energy turnaround in the heat sector”. “Heat planning offers multiple benefits. It is intended to demonstrate to municipalities how to transition to a climate-neutral heat supply, coordinate the necessary actions and stakeholders, and create stability for forward planning – for property owners, for example,” says Tanja Kenkmann. “It also increases efficiency by avoiding parallel structures.”

The aim of the project – conducted on behalf of the Federal Ministry for Economic Affairs and Climate Action (BMWK) and the Federal Energy Efficiency Center (BfEE), which is part of the BAFA – is to support the enshrinement in law of municipal heat planning, including minimum criteria and a single methodology. There’s a snag, however: “In our federal system, the national government does not have the legal means to impose these obligations on local authorities across the board. Only the regional states (Länder) can do that.” As data availability is vital for the production of a heat plan, a further task, according to the project team, is to define precisely which data may be collected and used, and how. “Some of this is sensitive personal data relating to energy consumption, for example. So proportionality is important and data privacy must be guaranteed.”

The project team is calling for mandatory nationwide heat planning to be phased in over time. “There are around 700 local authorities with more than 20,000 residents; they are home to around 60% of the population. As planning consultancies also have limited





resources, the first step is to introduce an obligation for larger local authorities. It should then be rolled out stepwise in smaller local authorities as well."With regard to the data situation, the study reveals that the Authoritative Real Estate Cadastre Information System (ALKIS) run by the Working Committee of the Surveying Authorities of the Länder of the Federal Republic of Germany (AdV) is a particularly suitable tool. "This can be supplemented by municipal data on the year of construction or number of floors in a building, for example, and by other data from local stakeholders. However, comprehensive information on heat demand and heat consumption in buildings is not yet available. Data from energy suppliers and the digital records kept by heating maintenance and flue cleaning companies can help to fill the gap here." Local energy utilities also hold data on the supply infrastructure. "Of course, there are many other data sources, so it would be useful to set up a nationwide register that also includes information on renewables' heat generation potential and the scope for waste heat recovery."

### A QUESTION OF FINANCE

Numerous federal funding programmes already provide support for climate action, including at the local level. "Examples are the environmental bonus for electric vehicles and the regionalisation funds, which have now been increased and aim to make local transport a more attractive option," Jonathan Schreiber explains. However, to ensure that adequate financial resources are available for municipal climate action, a basic level of funding is required over the long term, as Tanja Kenkmann emphasises. "Without it, climate action will only ever be project-based, making it impossible for local authorities to embed it as a strategic objective. It would also be put on the backburner when funds are scarce. The loss of the revenue that the local authorities currently receive via the municipal utilities is another important issue." The future direction taken by the gas networks is likely to be significant for city and municipal budgets. "The local authorities receive

concession fees from the gas suppliers for the use of the gas mains, and this is a substantial income stream. If this falls away, it will affect local authority funding. From my perspective, there is an urgent need to calculate precisely what effect this will have."

### TRIALLING SUSTAINABILITY

So how can municipal climate action be successful? The Oeko-Institut has explored this question in three neighbourhoods in Darmstadt as part of the Transformative Strategies for Integrated Neighbourhood Development (TRASIQ) project, funded by the Federal Ministry of Education and Research (BMBF). The second phase of the project (TRASIQ 2) focused on bicycle parking spaces, a sustainable heat supply and efficient use of living space, among other things. "A key element of the project was to trial planning forums which aimed to increase local residents' involvement in urban planning," Jonathan Schreiber explains. As he sees it, this model of participation achieved an important objective: facilitating dialogue among local residents and promoting acceptance of measures that may be unpopular in some quarters. "If people have the chance to make their voices heard and are taken seriously, more viable solutions can emerge."

During Phase I of the project, conducted in partnership with Darmstadt – City of Science, the Research Institute for Regional and Urban Development (ILS) and the team ewen agency, the experts developed a tool that can be used as a planning aid for new-build neighbourhoods, based on the Ludwigshöhviertel in Darmstadt. In TRASIQ 2, the tool was further developed for existing neighbourhoods. "In this way, it is possible to identify and visualise how specific measures influence energy consumption and emissions. Variables can include refurbishment rates and heat supply technologies," Tanja Kenkmann explains. "This can assist the local authority's efforts to communicate its climate strategy."

### A POSITIVE IMAGE

Municipal climate action is certainly not a simple matter. And it is often bound up with social conflicts. "While cyclists are probably happy to have a pop-up cycle route, car drivers may be annoyed at losing one of their traffic lanes," says Jonathan Schreiber. So it's important, in his view, to consistently highlight the positive aspects of climate action. "As well as persuading people and raising awareness, it is essential to continue working intensively on solutions that consider a range of stakeholder interests," his colleague Tanja Kenkmann emphasises. "However, let's not forget about improving and expanding sustainable offers such as local public transport."

Effective and successful concepts from other cities and municipalities can also convey a positive image and serve as models. "I am thinking of Pittsburgh, for example, where public buses are equipped with bike racks, or the super-blocks in Barcelona – these are integrated residential areas where through-traffic is diverted to nearby arterial routes. It's a concept which is now gaining ground in Berlin as well." These are just two valuable solutions among many.

*Christiane Weihe*



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