

Urban Doers Community

WiseEuropa - Facing Transport and Energy Poverty

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Abstract

It is clear that decarbonising the transport sector is a priority because of the climate challenges we face.

The challenge is to achieve this goal without creating social costs. Our work addresses the issue of energy and transport poverty that can result indirectly from climate policies. They affect the daily lives of residents, but in different ways - this is what we focused on using the example of the city of Krakow and neighbouring cities.

It is important to recognise that residents of city centres, outlying suburbs, and towns and cities surrounding cities have different interests. Those living in urban areas typically bear a significant financial burden due to the high cost of renting or purchasing housing. However, the smaller size of these homes often translates into more efficient heating, lower costs, and access to better public transport and bicycle infrastructure.

As one moves away from the city centre, beyond the reach of trams and light rail, the appeal of the private automobile increases. While the issue of limited parking space is less pressing, there are concerns about heating larger single-family homes. This is especially true when older, less energy-efficient homes are located next to newer, more efficient homes.

This interesting distinction is often overlooked in public discourse and expert discussions. It is essential to consider the transport and energy needs of these residents as part of urban transitions. These individuals are economically tied to the city and dependent on its resources, so it is critical to provide them with balanced mobility options to avoid emissions and congestion in the city centre.

It would be remiss not to consider these issues from the perspective of the elderly, a growing demographic with limited digital access. There is a need to implement tailored urban transformation strategies that take into account the sensitivities of different social groups (i.e., the elderly, the disabled, the poor). We suggest a gradual, evolutionary approach rather than a revolution that may not have social support.

It would also be helpful to draw on good examples of successful urban transformation from Western and Northern Europe in the areas of energy and transport. However, this will not succeed without taking into account local contexts. This is where civil society, including NGOs, has a key role to play.

Key lessons:

1. The phenomena of transport and energy exclusion in Poland have a different background and character than in Western European countries. This is due to different history, sociocultural, and economic conditions. We cannot transfer the experience 1:1 to the Polish specificity, but we can learn from it.
2. We have identified the divergent interests of residents of inner cities and suburbs. This is related, among other things, to economic status and, consequently, to the degree of energy and transport poverty (or lack thereof). We found that the elderly are a particular problem, especially in terms of access to public transport and digital services.
3. It is necessary to take into account the above-mentioned differences and try to adapt the urban transformation timetable to the sensitivities of social groups with different backgrounds (accelerated evolution, not revolution).
4. It is necessary to apply different measures in city centres and inner city neighbourhoods, in distant suburbs, and in communities that are economically linked to the city but not part of it. The application of sustainable mobility solutions will affect not only the lives of residents of these outlying neighbourhoods, but also those who live in the city centre.
5. Western and Northern Europe is home to several cities and metropolises that have undergone significant urban transformation. These cities serve as excellent models for other municipalities to emulate, taking into account local nuances. Sister-city cooperation can be an effective strategy.

Our actions in the context of the transport and energy situation in Poland

As a think-tank, WiseEuropa takes advantage of a broad spectrum of our own analytical capabilities - seeking, analysing and proposing solutions that contribute to the development of sustainable transport in Poland and Europe. Our goal is to improve the quality of decision-making in Poland and the EU through economic and institutional analysis, independent research and an evidence-based approach to impact assessment. As part of the Sustainable Transport programme, we pay particular attention to topics related to the interdisciplinary issue of urban and non-urban mobility. A key area of focus is the study of transport and energy poverty. The main objectives of our activities are the following:

- to decarbonise the Polish economy, especially the transport and energy sectors,
- to implement measures to limit the impact of the transition on the Polish population and reduce transport and energy poverty.

Here we will write about these issues from the perspective of ordinary citizens in the context of climate policy and urban transformation. Let us first set out some background to gain better understanding of the concept.

Interestingly, the Polish public and expert debate identifies energy poverty, but not transport poverty. Instead, there is another term: "transport exclusion". It describes a situation where people living in non-metropolitan areas do not have access to public transport, which hinders their ability to meet basic needs. It is

often misinterpreted to mean that public transport is inadequate or unattractive.

Meanwhile, the majority of public transport meets modern standards. An increasing number of transport lines in Polish cities are now served by electric and hybrid buses, which, despite economic and ecological concerns, represent a significant step towards improving the environmental friendliness of public transport. Rail, trams and trolleybuses have also seen notable improvements – see the underground tram stop in Krakow in Fig. 1 with access to the underground stop adapted to people with impaired mobility.



Figure 1: Underground tram stop in Krakow. An example of best practice in infrastructure design. The stop is located just below the platforms of the main train station, with direct access from the main bus station. The tram rolling stock is modern, and the place is safe and friendly. An electronic departure board with real-time updates and a ticket machine are in operation. Source: Krzysztof Krawiec

However, despite advancements in technology and organisation, there is still work to be done to adapt to passenger needs and ensure easy and intuitive access to transport services (user experience). This work mainly involves addressing unclear commercial offerings, the lack of fare integration, and the insufficiently developed and user-friendly distribution network for public transport tickets.

A notable distinction between public and suburban / suburban bus transport is the absence of a unified system. In many cases, there is a lack of fare integration with public transport, particularly when there is a lack of integration between individual carriers, who sell the majority of tickets on a distance fare that applies only to their own company. The situation is similar for monthly tickets, which are, however, less prevalent than in public transport.

Public transport provides convenient access to a wide range of services and amenities within city boundaries. This is made possible by the availability of public and private transport options within the city limits. However, the quality of transport services declines significantly just outside the city limits in the surrounding municipalities with a mix of rural and urban characteristics.

Diverse residents, varied perspectives, different interests

Transformation of urban areas presents a diverse set of challenges, given the inherent diversity of these areas. It is common to focus on the challenges facing Europe's largest cities, including congestion, air quality, lack of climate neutrality, and social inequalities.

However, this is not the only aspect of the problem. In our project, we focussed on examining the discrepancies in interests between different groups of residents in different geographical areas.

When discussing urban transformation, the focus is typically on residents of central districts and well-connected neighbourhoods. From their perspective, the provision of high-quality public services, affordable rent, and associated costs (such as heating in the context of energy poverty), as well as the development of resident-friendly public spaces, are of paramount importance. A significant number of projects and implementations are being developed by our highly competent colleagues in the DUT Partnership, with whom we have a strong collaborative relationship.

We have identified a specific target groups:

- Group No. 1: People living in city centres and neighbouring areas. They usually pay quite a lot for housing fees, but have good public transport options and their monthly ticket is in the first, cheaper ticket zone. They have a vested interest in the quiet they constantly lack in the noisy city centre and urban transformations to achieve liveable cities.
- Group No. 2: People in more distant suburbs, in and around the city. They have larger house, which increases their heating costs. They have more space to park and an inferior offer of public transport - this encourages them to choose personal motorisation. In their case, their mobility choices depend on individual preferences and public transport offerings
- Group No. 3: People living in smaller towns with economic ties to the city. They are the ones with the highest heating costs, because - especially in Poland - houses in rural and quasi-rural areas are large, often built to house multi-generational families. Public transport is also deteriorating compared to previous groups. It usually is, though more expensive: longer distances and often commercial carriers, as these areas may lie outside the reach of city-organised public transport.

The issue is particular to Polish cities, though it may also be relevant to cities in other parts of Europe. Our objective was to engage in a constructive exchange of ideas with citizens, municipal authorities, and other NGOs. We aim to present a central European perspective on the Europe-wide issue of transport and energy poverty, acknowledging the varying interpretations of this issue in different countries and regions. In this context, there was greater comprehension of the disparate agendas of various social groups, including those affected by poverty related to energy and transport.

Three-speed transportation

Our objective was to perform analytical workflows and communicate them to urban communities and stakeholders through numerous seminars and workshops (incl. some dedicated to the topic of transport exclusion: Alternatives to "PKS" regional public transport system? The future of transport outside metropolitan areas) and analytical publications (incl. On the Route to Nowhere: Transport-related exclusion and climate policy). In this paper, we stated that the problem of transport-related exclusion also has an environmental dimension. In the context of the challenges of climate change and the resulting European Union climate policy, there is a risk of a 'three-speed transport system':

- Climate-neutral large cities and metropolises in the medium term,
- Moderately environmentally clean medium-sized cities and towns,

- Small towns and rural areas excluded from the energy and climate transition

What was interesting during the project was the intermingling of this division and the three groups mentioned above. Note Fig. 2 showing the timetable in the suburbs of Krakow. Even at the level of aesthetics of the layouts, we can see the difference with Fig. 1.

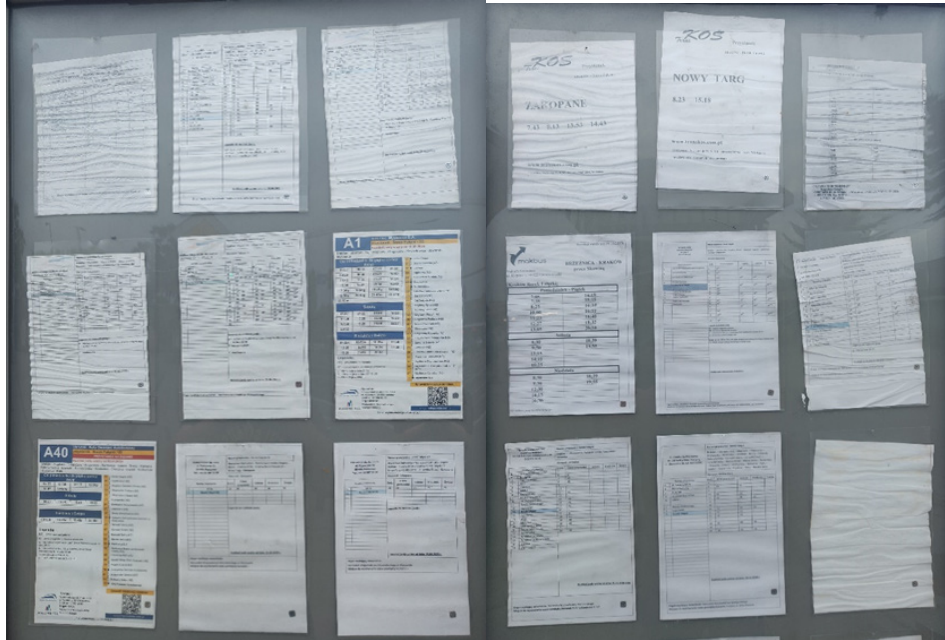


Figure 2: Board with schedules of suburban commuter carriers. Here we see a lack of readability and a lack of fare integration. There are no electronic displays, no clear and transparent fare offerings. Source: Krzysztof Krawiec

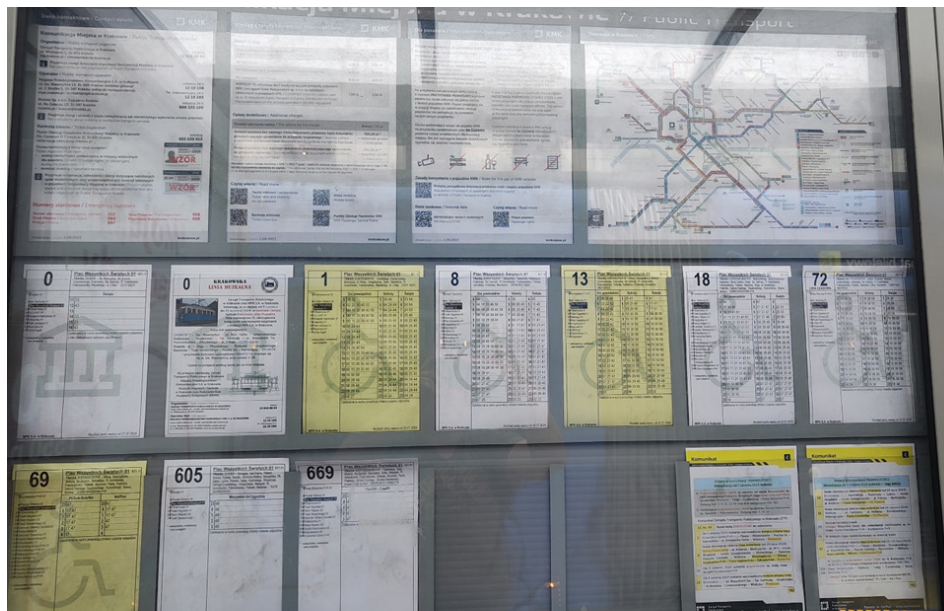


Figure 3: Board with schedules of urban public transport. It is worth noting the clear marking of line numbers, diagrams and the aesthetics of the markings. Source: Krzysztof Krawiec

Anyway, let us look at the development of the area itself. In one of the photos, we see a stop in the historic centre of the city. It is of a street where only tram traffic is allowed, and all around we have space dedicated to pedestrians and, to a lesser extent, cyclists. In contrast, we have a car-oriented transit road on the outskirts of the city with no urban greenery, but with a lot of traffic and traffic noise.



Figure 4: City centre tram stop in the area dedicated to pedestrians and public transport. Source: Krzysztof Krawiec



Figure 5: Suburban bus stop in the car-oriented area. Source: Krzysztof Krawiec

In addition, we have published analytical content on the topic of energy poverty. We also published the report „Without a Conductor: Instruments to decarbonise public transport”. Given the anticipated drive towards climate neutrality and shared challenges with their Western European counterparts, Poland’s largest metropolitan areas should be treated as a distinct case. In this report, we stated that it is unlikely that changes in long-standing and complex processes that have led to the phenomenon of forced car use in provinces and smaller urban centres and the resulting high emissions from transport will occur rapidly. However, this does not mean that we should accept the current situation, as it exacerbates the issue of transport-related exclusion and transport poverty. In the report, we also propose an immediate cessation of the implicit subsidisation of car travel through the provision of valuable public space for free parking, a practice that has been misinterpreted as a form of inclusivity. This measure is highly ineffective, resulting in increased air pollution and a continuing shortage of these spaces due to the induced demand to move cars into city centres. Additionally, we acknowledge that it is challenging to anticipate that residents will enthusiastically accept the proposal to completely abandon driving their own vehicles.

We highlight concerns regarding the inclusivity of urban mobility. We also advocate for the respect of seniors, individuals with functional limitations (including those with mobility issues), and digitally excluded individuals. We observe a growing trend of transferring passenger information to the Internet. However, in the context of an aging population and the phenomenon of digital exclusion, this approach is misguided and needs to be kept offline (at least for a couple of years). It is unfortunate that mobile apps are not the solution for this age group, as is often suggested in the literature on transport accessibility for different groups.

How to ensure sustainable mobility in non-central areas and how this relates to energy poverty

In Poland, the issue of transport-related social exclusion (in short, transport exclusion) is largely concerned with the lack of access to public transport or its limited offerings. However, this is only one aspect of the challenge of accessibility to transport services from the perspective of the general public. The increasing cost of mobility has led to an increasing discussion within the European Union and in developed countries around the concept of transport poverty.

The problem of transport exclusion is typical of the No. 2 and No. 3 groups described above, but they are the ones who suffer the most from energy poverty (especially older, less affluent residents). Why are we addressing this and why is this a challenge for “urban challenges”? Because they also consider themselves users of the city and their interests in the area of sustainable mobility and energy issues are different. For them, the best option, oversimplifying things a bit, would be a high-capacity road network with ample parking availability. For obvious reasons, this is unacceptable both to the interests of the group No. 1 (inner-city citizens) and for climate-environmental-spatial reasons.

Another challenge is environmental pollution, which is higher in areas inhabited by groups number 2 and 3, which may be surprising to people from abroad. The reason for this is the individual, coal-based heating of old houses with low energy efficiency. Pollution in cities has other sources, more often related to individual transport.

A review of the European literature on transport poverty reveals a correlation between housing and transport costs. The study highlights the tendency of economically disadvantaged residents to relocate to peripheral areas with inferior public transport options. This results in an increase in transport costs due to the necessity of owning a vehicle.

The key takeaway is the realisation that the effectiveness of policies aimed at reducing transport exclusion should be gauged not by the mere availability of transport services, but by the ability of individuals to meet their needs.

Another challenge is the issue of social change. Residents of Polish cities tend to be quite conservative and attached to property and individual motorisation, which can be attributed to historical conditions.

One of the primary challenges facing transport is the integration of public transport (buses, trams, trolleybuses) with rail transport; in Poland these solutions are not widely developed. To accelerate the integration of fares, it is essential to standardise concessions and discounts across different modes of public transport. Furthermore, it is crucial to develop a set of best practices in this area, drawing on the experiences of other countries.

Different areas of the city: how to reconcile conflicting interests?

Our ambition is to create a cohesive civil society based on understanding the different needs and baggage of experience, offsetting the effects of energy and transport poverty. The result can be a better quality of life for residents of No. 1, but taking into account the sensitivities and intentions of the No. 2 and 3 groups.

It is important to note that changes towards sustainable urban mobility may have a particularly adverse impact on residents of areas with less optimal urban planning, where the main mode of daily transport is the ownership of up to two or three cars per household. For suburban residents who work and use services in cities, the introduction of new emissions burdens or clean transport zones can result in more pronounced effects, potentially leading to less social acceptance.

Our ambition is to make sustainable mobility possible and socially acceptable not only for the No. 1 group but also for the others. However, it is important to understand people's concerns and communicate accordingly.

To address this issue, our organisation conducted workshops with various stakeholders, including public authorities, residents, and NGOs. We also participated in debates and conducted qualitative research, including in-depth interviews and literature analysis. These activities spanned different scales, from local to national. However, the scale of the problem we addressed in the project was significant not only at the local level but also beyond.

Can people change their habits to be more sustainable? Our experiences based on the project

What we find particularly interesting is the diversity of interests of different groups of city residents. Given the cross-cutting nature of our work at the interface between cities, their residents, and NGOs, we are amazed at how residents of the same area live in different information bubbles. Drivers' groups, for example, would see most DUT projects as taking away their freedom to drive conventional internal combustion vehicles, which they see as their right. Those concerned with walkable and liveable cities are at the other extreme.

Our task has been to build a consensus that can be addressed, but that takes different forms in different cities (or even different parts of cities). In general, sustainable mobility projects in Poland have more supporters when they take place in places related to tourism (e.g. old town, historical sites). The situation is much more difficult when it comes to places related to professional and, even more so, commercial activities.

It should be noted that Poland lags behind cities such as Copenhagen and Amsterdam in urban mobility. This is culturally and socially understandable: it has been undergoing a transition period from a centrally controlled economy to a market-based system, with rising living standards, but still diverging from the 'old' EU-15 member states. Poland has relatively recently had good quality and capacity of public roads (including motorways and expressways), as well as affordability of motor vehicles relative to income (perhaps for a dozen years or so). Unlike in Western Europe, Poles could not afford cars for years (during the previous regime), and only since the country's accession to the European Union have there been quality roads. In this context, it is not surprising to see a splurge on individual automobiles (because Western European societies were also at this stage, only in the past). It takes time, and our experience is that the larger the city, the greater

the public acceptance of the transition to a sustainable and climate-neutral car. We expect this positive attitude to spread to smaller cities and suburbs.

However, to motivate users to change their mobility habits, it is also essential to implement a multifaceted approach that encompasses legislative, organisational and administrative changes. Here, however, our role is limited and it is necessary to act on the part of stakeholders over whom, as an NGO, we have no influence.

Long-term strategic takeaways and outcomes

We believe that residents are crucial to the success of this project. Without their active participation in guiding the process from the top down, we will not achieve the desired outcomes. Ultimately, these solutions are being implemented for the benefit of the residents and it would be beneficial to include them in the project planning process.

In Polish conditions, three paths related to energy and transport poverty are essential:

- Providing support to households in replacing high-carbon stoves, with a particular focus on suburbs and areas located somewhat remotely from urban centres. This will result in an improved air quality for the primary beneficiary group.
- The development of public transport in the outskirts of cities will improve the quality of life (and environmental parameters) in the inner city by providing a sustainable alternative to the personal car. This is a process that will take years to complete, but it is a worthwhile investment. To support this initiative, a dedicated bike lanes system must be developed.
- From our workshops and events, it became clear that the European Social Fund could play a pivotal role in combating transport and energy poverty. It would be beneficial for representatives from social circles and NGOs to participate in its programming.

The aforementioned learnings can be applied more widely, including to neighbouring countries of Poland and, to a lesser extent, to Western and Northern Europe.

Our plan for the future

The matter is comprehensive and complex, making it unfeasible to complete in a single project. The Polish context presents a number of challenges in the area of sustainable mobility. This is due to the fact that there has been a significant delay in the adoption of sustainable transport solutions, particularly compared to other countries. It would be beneficial to consider the experiences of western and northern European countries that have already undergone or are further along in this process. It is essential to understand the needs and backgrounds of local residents to ensure effective decision-making. However, this must be done in a way that addresses the climate challenges that we are facing. Public resistance to necessary changes must be addressed to ensure the success of these efforts. There is a significant opportunity for further research in the sociological field, as well as for the implementation of well-organised social communication strategies that consider the participation of various stakeholders and actors.

We intend to proceed with the project, building on the contacts made and paths identified. This is a multi-year project, funded by a combination of sources and involving community engagement. It would be particularly beneficial to concen-

trate on local case studies and local urban professionals.

From a national point of view, it is crucial to engage in constructive collaboration with a diverse range of stakeholders, including municipal and regional authorities, civil society, and its representatives. The absence of dialogue presents a significant risk, while a well-designed and conducted consultation offers a promising opportunity for the implementation of sustainable urban mobility.

As mentioned above, there are notable differences between the Polish and Western European contexts. Although surmountable, this challenge will require a significant investment in time and resources to educate stakeholders about climate risks and the need for urban transition. However, let us constantly point out that the transformation of cities must happen in the suburbs and municipalities economically connected to the city.

From our perspective, the diversity of interests among different social groups represents a strength, as does the changing urban fabric and the residents of urban areas. We anticipate a number of promising years ahead in this area, with the potential for numerous implementations from Urban Doers, which we are eager to support.