

Communication strategy for circular economy in the municipalities

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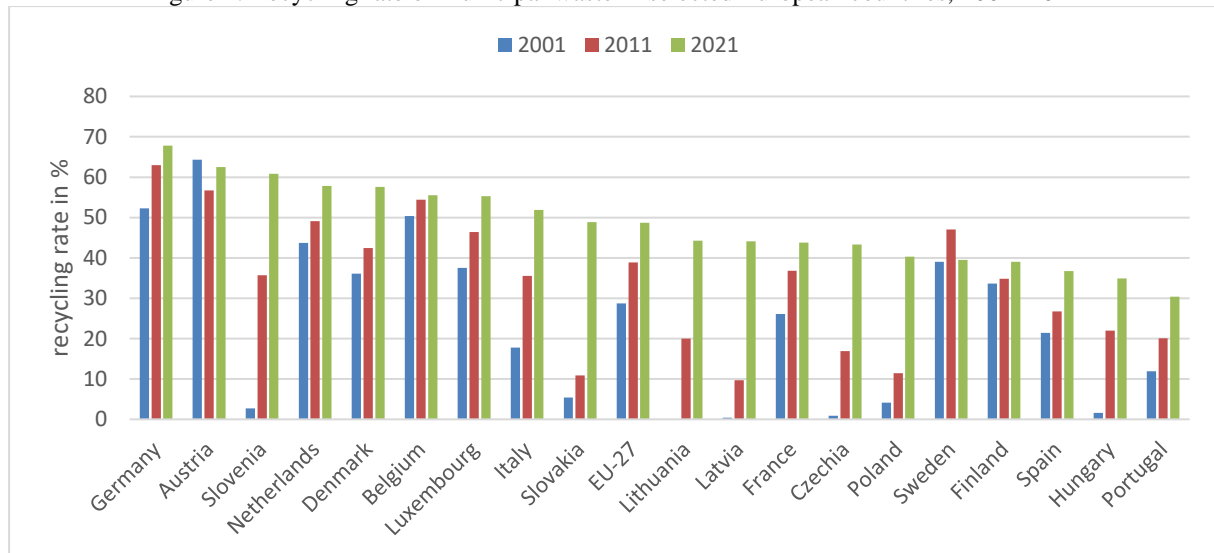
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Proper waste management in municipalities represents a crucial component of ongoing efforts to improve environmental performance, reduce the generation of waste and even reduce the need for the new material extraction, following the idea of circular economy. However, such waste management requires detailed planning, a profound understanding of local situation and practices, the establishment of sufficient infrastructure and an efficient collection system (bins, separation sites, frequent and inclusive collection service, but also active promotion and communication of the topic directed at the citizens).

Prevailing experiences from recent years show that majority of the efforts in improving the municipal waste management is focused on improving the technical aspects and infrastructure related to the municipal waste management. For instance, the average distance to the nearest drop-off site for waste recyclables in Czechia has decreased to less than 100 m in the recent years, or in other words, it takes less than one minute for a person to reach the nearest site where at least basic level of waste separation is available. This availability is naturally higher in more densely populated areas and lower in more rural areas, but the general availability of proper waste separation seems to be more than sufficient in many developed countries. However, while this distance and thus the availability is continuously improving, waste separation rates seem to be rather stagnating.

Good availability of waste separation options here acts as an important step in pursuing the goal of reaching circular economy. After the proper separation of the recyclables, much of the matter can be further processed and turned into new products without that high requirement for new raw materials. However, sole availability of waste separation sites does not guarantee high levels of waste separation by itself, plus it typically does not promote an even more desired waste reduction. If we look at the available data from EU, we can see that while great progress can be made, there seem to be sort of practical limits to how much municipal waste can be separated and subsequently recycled in practice. Following Figure 1 with selected well-performing EU countries show that while many EU countries have significantly improved in previous decades, levels in the range of 50–60% look like a practical limit for many of them.

Figure 1. Recycling rate of municipal waste in selected European countries, 2001–2021



Source: Eurostat (2023), adjusted by the authors

However, when analysing the content of the residual municipal waste, evidence from multiple Czech municipalities of various sizes shows that in many cases 60% of this waste contains recyclables that could have been separated, thus showing a large potential for further improvement. As this evidence is available from many municipalities and spans over multiple years, it seems that there is a significant group of people that continue to exercise improper waste behaviour and not separate their municipal waste properly.

One might suggest that this is not such an issue, as the residual municipal waste could still be utilized through the process of energy recovery or in waste sorting plants, thus avoiding the least favoured option of landfilling in accordance with the waste hierarchy. While this is true, there are at least two issues with this approach. First is in the fact that waste hierarchy puts multiple treatment options before these, namely re-use and of course recycling. And the second one is that the further down the waste hierarchy we go, less environmentally friendly and often also more expensive the treatment options become, while also deviating from the idea of circular economy. Thus, it is recommended to aim for prevention, re-use or at least recycling that naturally requires proper waste separation. And when consider these options, it becomes clear that the higher the waste hierarchy we go, the more important are non-technical measures that include communication and education of the citizens who create the waste in the first place and who are at the very beginning of the whole waste management process. In the light of the multiple findings from the current levels of waste separation in many developed countries, focus on the communication and education aspects, in our opinion, represents the biggest potential in how to further improve already achieved (and often stagnating) municipal waste separation levels and even further reduce overall waste generation levels.

To tackle this issue, we have designed a general communication strategy for the municipalities that is focused on improving citizens' waste behaviour. The goal is to highlight the key aspects that should be communicated with the public, present proven ways how the communication with the public should happen, and finally provide concrete examples that could inspire practitioners when adapting the proposed strategy for improving circularity in the municipalities.

Based on other available communication strategies, we first present the general role of municipalities in the waste management system together with the current results based on applied measures. This is followed by the theory on factors that influence waste behaviour of the people and the common principles how to communicate (not just environmental) topics with the public. Finally, selected communication tools suitable for the waste management with practical examples adapted to the municipal environment are presented. This first part of the strategy is then followed by a practical guide with instructions how the communication strategy should be adapted in the individual municipality with additional examples of practical use.

Created strategy was subsequently presented to the representatives of the municipalities with the goal of providing feedback and adding further comments for improvement. Practical workshop with the presentation of the communication strategy was organized for the representatives of municipalities and additional feedback was gathered. After including the comments and findings from the practitioners, final version of the strategy has been provided to the municipalities for utilization.

Such communication strategy for the municipalities represents a valuable addition to already existing infrastructure and allows reaching higher levels of waste separation and overall lower waste generation while utilizing typically less costly measures. Additional benefit of utilizing communication strategy is higher engagement with the public, getting feedback directly from the target group and potentially identifying creative solutions that respect local specifics with the possibility to reach higher overall effectiveness and thus go beyond targets that are being commonly achieved today.

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