

What motivates people to separate waste and how to improve it – comparison of Taiwan and the Czech Republic

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Performance of waste management policy (WMP) depends to the great extent on efficient waste separation at all levels, including individuals and households. Source separation represents the most economical and effective way how to separate waste, as it gets separated before there is any chance of mixing with other waste fractions. Therefore, residents' attitude towards waste separation and their overall waste-related behaviour play a significant role in the whole process. In order to achieve high waste separation levels, WMP can use different tools to motivate people to be more responsible in their waste separation behaviour and its design varies in different regions. These include typically economic and administrative instruments (both rewarding and punishing) and information campaigns.

For the needs of this work, we can divide WMP into two major categories based on obligatoriness of waste separation: mandatory and optional. Mandatory separation policies are usually based on monetary incentives, such as fees for non-compliance or rewards for acting in a desirable way. Optional separation policies rely upon moral obligations of citizens, particularly, their ecological concerns, and often use education and information spreading as the main tools to promote waste separation.

This work focuses on comparison of semi-mandatory waste separation system in Taiwan and optional waste separation system in the Czech Republic. The goal is to compare tools used in both countries and discuss their perceived usefulness and effectiveness from the residents' perspective. Expected outcome is to provide two-way suggestions in order to improve practices in both regions, and thus basically learn from each other. The idea is to indicate Taiwan and the Czech Republic residents' subjective attitudes towards WMP and investigate when and why they separate waste. This work will also provide citizens' feedback on the current WMP in both countries and suggestions on how it can be improved.

Over the past few decades, Taiwan succeeded in achieving one of the highest rates of waste separation in the world. Many cities, alongside with mandatory separation, use different instruments to increase separation rates and diminish residual waste disposal. Unit pricing (pay-by-the-bag) and special bags for non-recyclable waste fraction collection were implemented to incentivize citizens to reduce an amount of general waste and increase waste separation rates. This transparent garbage bag policy and options for one-time collection make checks on non-compliance of the users easier. This mixture of instruments, among other things, makes it easier to pursue implementation of circular economy as a general goal.

On the other hand, municipal waste separation is optional for households in the Czech Republic, and residents are not forced to separate waste by any means. But since the Waste Management Plan of the Czech Republic for the period 2015-2024 sets the transition to the circular economy as one of the main objectives, current levels need to improve significantly. Due to this we find it useful to compare the Czech Republic's and Taiwan's WMP (policies, instruments, etc.), including citizens' perception.

This study (alongside review of current literature) is mainly based on the results of in-depth qualitative interview with sample of residents in both regions. Since motivation to separate municipal waste and attitude towards obligatory system may be influenced by cultural and historical background, we decided to interview people, who spent at least 2 months both in Taiwan and in the Czech Republic and thus had experience with both WMP. In addition, we interviewed long-time residents in either of these regions as well, so that the different perceptions influenced by cultural background can be taken into consideration. Based on these interviews we will investigate residents' knowledge of the systems, perceived convenience, and their willingness to take active part in waste separation. Also, we want to determine whether economic incentives or moral obligations play the main role in their motivation to separate waste, and what can encourage people to separate even more, if possible. Findings will be then compared with the available literature from other countries in order to identify similarities and differences. Finally, conclusions and suggestions on improving the current systems will be drawn.