

Circularity for Educators

05. New Horizons

Policy Instruments for Circular Cities and the Built Environment

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As countries and cities set circular economy goals for their built environment, the need to translate those ideas into concrete actions requires major changes in construction policies. Transitioning to a circular economy requires multiple policy instruments, or tools, to change linear practices in construction to circular ones. Let's discuss the importance of policy instruments for this transition.

Broadly speaking, a policy is a process through which governments seek to transform an otherwise problematic situation into a more desirable one. Policies tackle problems of social relevance by setting goals and applying instruments to the general public or specific groups in society. For instance, take the issue of poorly insulated old buildings in a city. Once a local government identifies this issue, which affects the economy and health of households, it may try to improve this situation by providing subsidies to citizens so that they can improve their windows and roofs.

Many classifications of policy instruments exist, yet the most prominent is arguably that of *Evert Vedung*. His classification distinguishes between *three types of instruments: regulations, economic means*, and *information means*. In policy science this classification is also known as "sticks, carrots, and sermons". This is based on the analogy of the strategies used to direct a donkey when working on farmland. Following the analogy, one can either

hit the donkey with a stick, place a carrot in front of them as an incentive, or shout at them to make them move.

Let's replace the donkey in this analogy with the construction sector, and farmland with the circular built environment, and see how policy instruments play a role in making it possible. What policy instruments are normally discussed for a circular built environment? We will now explore six of them:

Under *regulation instruments* one may find:

- Standards for setting minimum targets of material reuse in construction that aim to introduce reuse targets in building codes and local plans to accelerate the adoption of circular practices.
- Or Material Passports that will help to improve the transparency in materials' use and intensity, which is key to enable a market for secondary materials and components once a building has reached the end of its lifecycle.

Next, under *economic instruments* one may find:

- Market formation for secondary resources, for a working circular economy requires us to dismantle the barriers for secondary resource exchange at a local level. Market formation can be accelerated by the creation of market places as well as reductions in transaction costs.
- Also, a carbon tax to reduce embodied and operational carbon; a carbon tax has been widely



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accepted as a way to discourage new build and support renovation, as well as to shorten supply chains.

Finally, under information instruments one may find:

- best practices guidelines, through which national and local authorities can inform different stakeholders in the construction sector of the latest best practices in circular construction.
- And once again, material passports, which shows the versatility of some tools. As a material passport is implemented, it creates an obligation for developers and construction companies to provide specific information, and, at the same time, it establishes an information mechanism so to inform markets about the availability of secondary resources.

These are some of the most discussed instruments to enable a circular built environment to date. Yet, few of them have actually been implemented so far. Some underpinning reasons for this are tied to multi-level governance, the lack of information and capacities of governments, and political will.

Nevertheless, thoroughly designed and applied instruments will play a crucial role in enabling a more circular built environment.