

# THE URBAN POLICY INSTRUMENT FRAMEWORK

USING POLICY TO STEER CITIES  
TOWARD A CIRCULAR ECONOMY

City authorities are able to steer the dominant system toward new orientations—such as a circular economy—through policy. With the different instruments at their disposal, they are able to incentivise businesses, citizens and other governments to adopt certain actions. In the pursuit of a more circular economy, particular policy instruments hold a pivotal role to support the adoption of circular strategies. They can also be instrumental in ensuring economic, societal and environmental value during the transition.

However, due to the diversity of available tools and instruments—that may also vary within different governmental contexts—it can be difficult for municipal policymakers to understand which specific and available policy instruments can support circularity. Therefore, it is important to identify and categorise a clear framework of available policy instruments for a more circular economy to support policy- and decision-making.



## WHAT IS IT?

### v2. Urban Policy Instrument

A policy instrument intervenes in an economy and society, with the intention of changing how the system operates. Based on the influence of policy instruments in cities, this framework is arranged into five main categories:

#### Urban themes:

- **Mobilise**

The theme sets the direction of and builds momentum towards long-term change, while also determining how this direction is determined and governed.

- **Educate**

The theme increases the overall levels of awareness and builds the necessary skills and knowledge around the circular economy to foster long-term change.

- **Manage**

The theme influences the use and function of physical and material elements within the urban environment.

- **Incentivise**

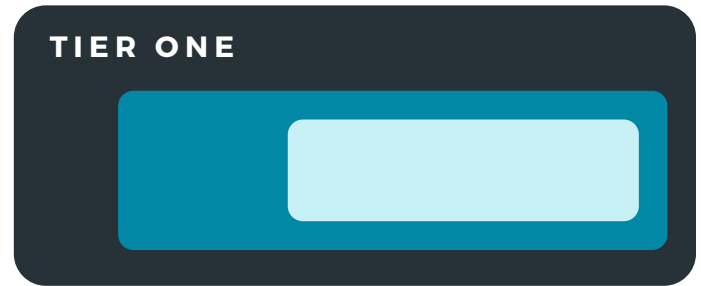
The theme sends market signals and support to businesses, citizens and governments to promote certain activities.

- **Regulate**

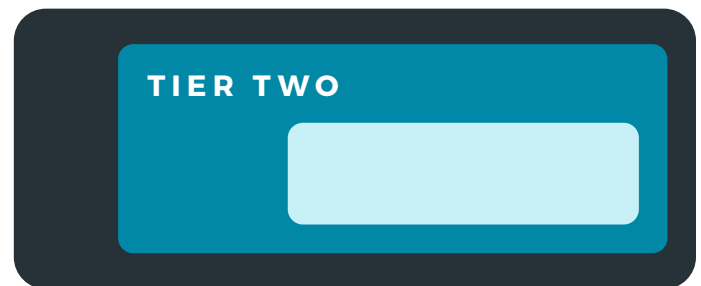
The theme changes the rules of the systems to achieve compliance through enforcement.

### The framework consists of three tiers:

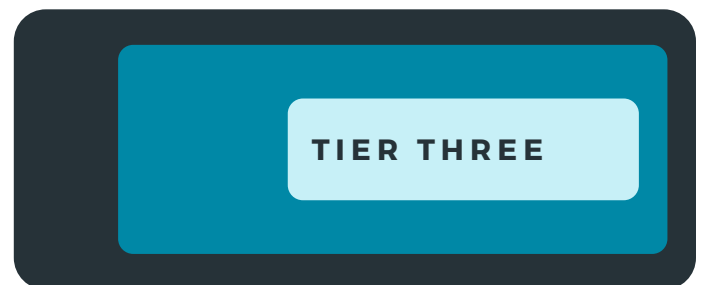
**Tier one** indicates the key function that policy can play.



**Tier two** presents key policy directions.

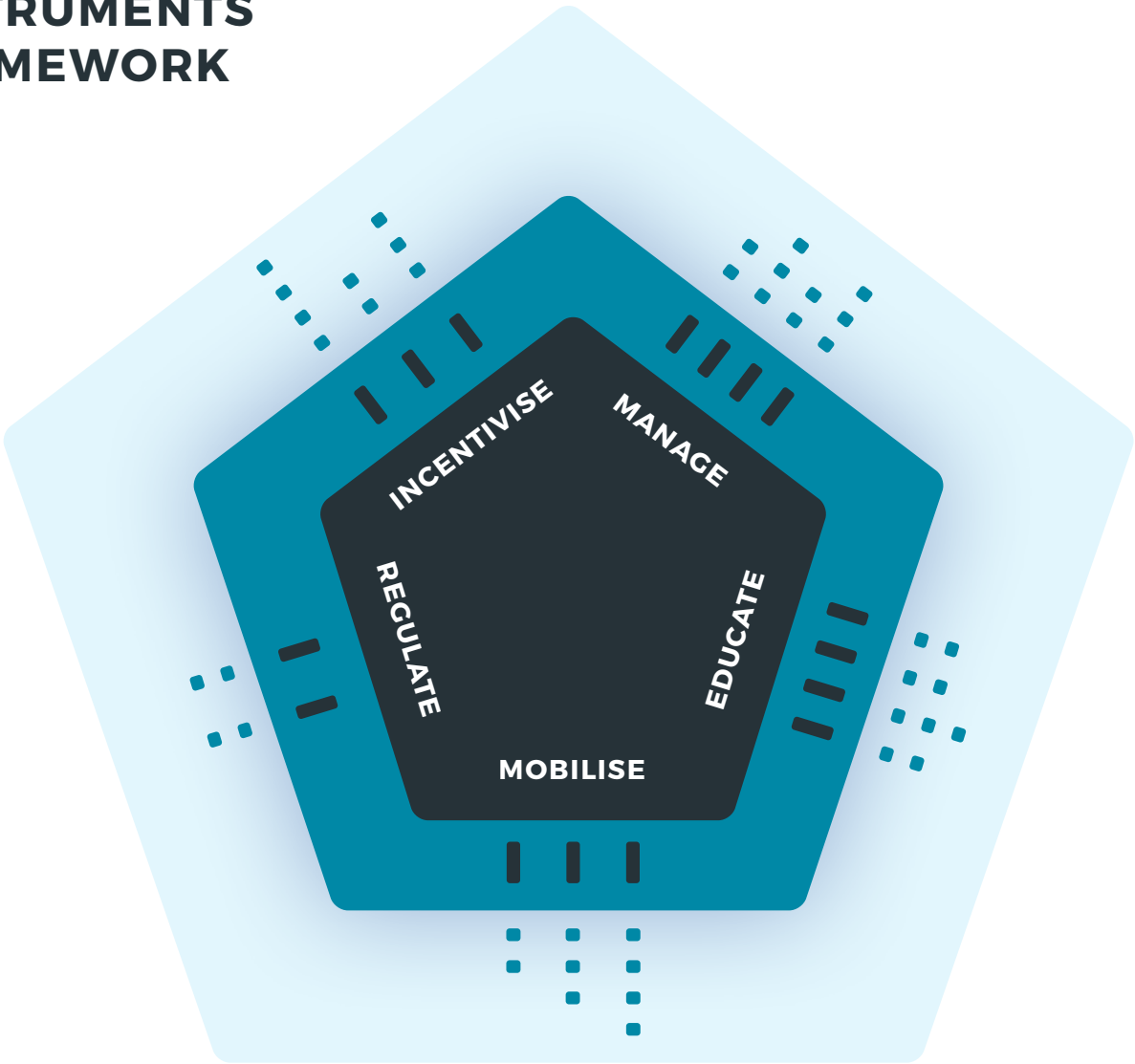


**Tier three** presents a specific urban policy instrument.



Each **Tier three policy** is also linked to a relevant case example to further illustrate its application.

# THE URBAN POLICY INSTRUMENTS FRAMEWORK



All Tier three urban policy instruments are links to an external website.

MOBILISE	Visions and Ambitions	Roadmaps and strategies and targets
		Metrics and indicators to measure progress
	Govern the Transition	Institutional design to enable circularity
		Participatory governance mechanisms
		Cross-departmental collaboration and engagement
	Convene Towards Action	Advocate for circular change
		Voluntary agreements around circular ambitions
		Crowdsourcing and challenge mechanisms
		Matchmaking platforms

EDUCATE	Communication and Awareness	<ul style="list-style-type: none"> <li>Information campaigns</li> <li>Awareness raising events</li> </ul>
	Education and Curriculum	<ul style="list-style-type: none"> <li>Circular Economy in school programmes</li> <li>Encourage workplace training</li> <li>Extra-curricular education</li> </ul>
	Knowledge Management	<ul style="list-style-type: none"> <li>Data, knowledge &amp; information sharing</li> <li>Increase standardised data collection</li> </ul>
	Research and Development	<ul style="list-style-type: none"> <li>Conduct research</li> <li>Implement innovation programmes</li> </ul>
MANAGE	Spatial Planning	<ul style="list-style-type: none"> <li>Living labs</li> <li>Compact city development</li> <li>Site planning for circular material use</li> </ul>
	Public Procurement	<ul style="list-style-type: none"> <li>Develop circular criteria for public procurement of assets</li> <li>Innovation-oriented public procurement</li> </ul>
	Infrastructure	<ul style="list-style-type: none"> <li>Develop infrastructure to support resource cycling</li> <li>Develop regenerative infrastructure</li> <li>Develop infrastructure to support sustainable lifestyles</li> </ul>
	Asset Management	<ul style="list-style-type: none"> <li>Circular use of public-owned assets: land, buildings, equipment)</li> <li>Maintenance to extend useful life</li> </ul>
INCENTIVISE	Direct Financial Support	<ul style="list-style-type: none"> <li>Grant funding</li> <li>Debt financing</li> <li>Incubator and investment programmes</li> </ul>
	Frameworks	<ul style="list-style-type: none"> <li>Public-private partnerships</li> <li>Public-civil partnerships</li> </ul>
	Fiscal Frameworks	<ul style="list-style-type: none"> <li>Charges and tariffs</li> <li>Fines</li> <li>Tax breaks</li> <li>Subsidies</li> </ul>
REGULATE	Regulation	<ul style="list-style-type: none"> <li>Monitoring &amp; enforcement</li> <li>Environmental assessment &amp; permits</li> </ul>
	Legislation	<ul style="list-style-type: none"> <li>Bans</li> <li>Review and update regulation</li> <li>Other legislation</li> </ul>

The relevance of different (groups of) policy instruments will vary for cities based on how far they are in their circular transition. Further, the national political and administrative contexts of a country will influence the level of autonomy municipal governments may have in deploying policy instruments. Therefore, it is important for each municipal government to understand which policy instruments are most suited to their local context.

## WHO IS IT FOR?

The framework is designed for municipal policymakers and advisors that are working to implement the circular economy. It is geared towards an audience that understands the opportunities that a circular economy can deliver, and wishes to identify the practical tools and instruments that are at their disposal to support the transition within their city.

## HOW CAN THE FRAMEWORK BE USED IN PRACTICE?

Most recently, the City of Amsterdam used this framework in their **Circular Economy Strategy 2020-2025** as a foundation to identify priority actions. The framework can also serve as a unified foundation for further research into the impact of certain circular economy policies across a variety of outcomes, such as foreign direct investment.

The framework will also be integrated within Circle Economy's [Circle City Scan Tool](#) to help drive the adoption of circular policy instruments in cities around the world. Circle Economy's [Knowledge Hub](#) also hosts examples of policy instruments in practice, using version one of the Urban Policy Instruments Framework. It will be updated to reflect the updated framework.

## HOW WAS IT DEVELOPED?

**The framework has been developed based on both academic literature and case studies.** In the first iteration, the Toolkit for Policy Makers from the Ellen MacArthur Foundation (EMF) served as a basis. Using this foundation, the Circle Economy team collected [over 400 case studies](#) of governments across the globe supporting the circular economy and attributed these to the policy instruments put forward in the toolkit.

The framework was then enriched with policy instruments from academic and other literature through an extensive literature review. Next to the circular economy, this framework research also focused on the neighbouring fields of eco-innovation, green growth and sustainable development policy. Subsequently, the framework was reviewed by both experts and practitioners within the circular economy sector.

In a second iteration, the framework was enhanced to include the management of urban infrastructure, the mobilisation of relevant stakeholder groups to support and guide the transition and more detailed knowledge management strategies. The more action-oriented categorisation of EMF's Urban Policy Levers framework served as a guiding basis upon which to restructure the framework, as well as supporting literature and the Circle Economy team's practical experience working with municipal stakeholders. The output of this second iteration is a policy framework that is more action-orientated to support policy and decision-making.

WE'RE LOOKING TO TALK  
TO URBAN CHANGEMAKERS  
ABOUT THIS FRAMEWORK.

Contact us here:

[hello@circle-lab.com](mailto:hello@circle-lab.com)

## DISCUSSION

The framework recognises the diversity of measures that municipal governments can employ and the many ways to influence the circular transition. The measures, however, differ in relevance for different municipal governments, according to their mandate. So, it is important for further research to identify how relevant particular instruments may be to the common needs of municipal governments across geographical contexts, to different levels of government (national and international), as well as different 'maturity' levels of the circular economy transition. With such research, more targeted frameworks may be created that are tailored to a given level of government, mandate or stage of transition.

What is more, designing and implementing effective policy to support the transition towards circularity requires coordination and alignment with a variety of stakeholders, such as businesses, civil society, as well as other departments and levels of government. To further support the adoption of circular policy, it is interesting to explore which stakeholders and investments are commonly associated with a particular policy instrument.

Different policy instruments have a range of outcomes and impacts on particular systems or stakeholders, with some better suited to achieving particular outcomes than others. An important avenue for further research building on this framework is to study the efficacy of particular policy instruments on certain intended outcomes. Research in this vein has already begun to be carried out in relation to the effectiveness of certain instruments on foreign direct investment. Additional research to assess the influence of certain policy instruments on given outcomes could also be centred around, for example, per capita recycling and raw material consumption rates, and eco-innovation patents, among others.

Furthermore, government's policy interventions often consist of multiple instruments, resulting in a policy mix. Policy mixes leverage the interaction between policy instruments in order to achieve desired outcomes in a more efficient and effective way. For example, Extended Producer Responsibility (EPR) schemes are often implemented by means of product take-back requirements in combination with fiscal instruments such as penalties and charges. As such, EPR schemes enable environmentally sound end-of-life management, while negatively affecting the price of

undesirable end-of-life management. Further research and analysis to identify common policy mixes in relation to the circular economy can provide an important foundation for policymakers to support circular economy adoption. Finally, the current understanding of how municipal governments can intervene in a system to make it more sustainable orientation is continually evolving. As new and novel ideas and types of policy instruments are developed, such as fields of behavioural economics and 'nudging', it is interesting to see how the circular economy, and this framework, can evolve to incorporate such ideas and instruments to foster sustainable change.

### DISCLAIMER

We are striving to continually update our frameworks to ensure they remain relevant and are best suited to facilitate action. To this end, we welcome suggestions and comments on this framework from our Knowledge Community.

## REFERENCES

1. Gemeente Amsterdam (2020) "Amsterdam Circular 2020-2025 Strategy". [Online](#).
2. Circle Economy (2019) "The Role of Municipal Policy in the Circular Economy". [Online](#).
3. Ellen MacArthur Foundation. (2015) "Delivering the Circular Economy: A Toolkit for Policymakers". [Online](#).
4. Ellen MacArthur Foundation. (2019) "City Governments & Urban Policy Levers". [Online](#).
5. Circle Economy (2019) "The role of municipal policy in the circular economy". [Online](#).
6. Smets, A. & Lievens, B. (2018) "Nudging sustainable behaviour: the use of data-driven nudges to support a circular economy in smart cities" Conference paper: Smart Cities in Smart Regions.

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## RELATED LITERATURE

Some notable sources and references are included in the list below. A full documentation of sources for each policy instrument can be found on Circle Economy's [Knowledge Hub](#).

- Bouwm, I.M.; Gerritsen, A.L.; Kamphorst, D.A. & Kistenkas, F.H. 2015. Policy instruments and modes of governance in environmental policies of the European Union: Past, present and future. WOt-technical report 60. Wageningen University, the Netherlands.
- EC-IILS. 2011. Policy options and instruments for a green economy. European Commission & International Institute for Labour Studies. Joint Discussion Paper Series No. 12. Available online via: <http://ec.europa.eu/social/BlobServlet?docId=7251&langId=en>
- EJOLT. 2012. Policy Instruments for Sustainability. Environmental Justice Organisations, Liability and Trade. Available online via <http://www.ejolt.org/2012/11/policy-instruments-for-sustainability/>
- Ellen MacArthur Foundation. (2015) "Delivering the Circular Economy: A Toolkit for Policymakers". [Online](#).
- Ellen MacArthur Foundation. (2019) "City Governments & Urban Policy Levers". [Online](#).
- IPP (Innovation Policy Platform). N.d. Universities and

- Public Research Institutions. The Innovation Policy Platform, OECD & World Bank. Available online via: <https://www.innovationpolicyplatform.org/content/universities-and-public-research-institutes>
- Jordan, A.; Wurzel, R.K.W. & Zito, A. 2005. The Rise of 'New' Policy Instruments in Comparative Perspective: Has Governance Eclipsed Government? Political Studies. Vol.53 pp.477-496
- OECD. 2010. Regulatory Policy and the Road to Sustainable Growth. Available online via <https://www.oecd.org/regreform/policyconference/46270065.pdf>
- OECD. 2011. Environmental Taxation: A Guide for Policy Makers. Organisation for Economic Co-operation and Development. Available online via: <https://www.oecd.org/env/tools-evaluation/48164926.pdf>
- OECD. 2013. A Toolkit of Policy Options to Support Inclusive Green Growth. Organisation for Economic Co-operation and Development. Available online via: [https://www.oecd.org/media/oecdorg/directorates/developmentco-operation/directoratedcd-dac/environmentanddevelopment/IGG-ToolkitAfDB-OECD-UN-WB-revised\\_July\\_2013.pdf](https://www.oecd.org/media/oecdorg/directorates/developmentco-operation/directoratedcd-dac/environmentanddevelopment/IGG-ToolkitAfDB-OECD-UN-WB-revised_July_2013.pdf)
- OECD. 2016. OECD Policy Instrument for the Environment: Database documentation. OECD. Available online via: [http://www.oecd.org/environment/tools-evaluation/PINE\\_Metadata\\_Definitions\\_2016.pdf](http://www.oecd.org/environment/tools-evaluation/PINE_Metadata_Definitions_2016.pdf)
- Sánchez, Á.P. & Deza, X.V. 2015. Environmental policy and eco-innovation: An overview of recent studies. Ética Empresarial y Responsabilidad Social. Col. Vol.25(58)
- Silva, E. & Acheampong, R. 2015, Developing an Inventory and Typology of Land-Use Planning Systems and Policy Instruments in OECD Countries. OECD Environment Working Papers, No. 94, OECD Publishing, Paris.
- Tojo, N.; Neubauer, A. & Bräuer, I. 2008. Waste management policies and policy instruments in Europe. International Institute for Industrial Environmental Economies (IIIEE) Reports. Available online via: [https://www.ecologic.eu/sites/files/project/2015/documents/holiwastd1-1\\_iiiee\\_report\\_2\\_0.pdf](https://www.ecologic.eu/sites/files/project/2015/documents/holiwastd1-1_iiiee_report_2_0.pdf)
- White, R & HEckenberg, D. 2012. Legislation, regulatory models and approaches to compliance and enforcement. Available online via [http://www.utas.edu.au/data/assets/pdf\\_file/0006/278007/Briefing\\_Paper\\_6\\_-\\_Laws\\_Regulation\\_Enforcement.pdf](http://www.utas.edu.au/data/assets/pdf_file/0006/278007/Briefing_Paper_6_-_Laws_Regulation_Enforcement.pdf)
- WTO. 2006. World Trade Report 2006: Exploring the links between subsidies, trade, and the WTO'. World Trade Organization. Available online via [https://www.wto.org/english/res\\_e/booksp\\_e/anrep\\_e/world\\_trade\\_report06\\_e.pdf](https://www.wto.org/english/res_e/booksp_e/anrep_e/world_trade_report06_e.pdf)