



# **Circular Economy:** from Indicators and Data to Policy-making

Copyright © 2024 United Nations Environment Programme

ISBN No: 978-92-807-4127-8

Job No: DEW/2617/NA

This publication may be reproduced in whole or in part and in any form for educational or non-profit services without special permission from the copyright holder, provided acknowledgement of the source is made. The United Nations Environment Programme would appreciate receiving a copy of any publication that uses this publication as a source.

No use of this publication may be made for resale or for any other commercial purpose whatsoever without prior permission in writing from the United Nations Environment Programme. Applications for such permission, with a statement of the purpose and extent of the reproduction, should be addressed to the Director, Communication Division, United Nations Environment Programme, [unep-communication-director@un.org](mailto:unep-communication-director@un.org). The use of information from this document for publicity or advertising is not permitted. Trademark names and symbols are used in an editorial fashion with no intention on infringement of trademark or copyright laws.

### **Disclaimers**

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations Environment Programme concerning the legal status of any country, territory, city or area or of its authorities, or concerning delimitation of its frontiers or boundaries.

The views expressed do not necessarily represent the decision or the stated policy of the United Nations Environment Programme, nor does citing of trade names or commercial processes constitute endorsement. The opinions expressed in this report may not reflect the opinions of the author.

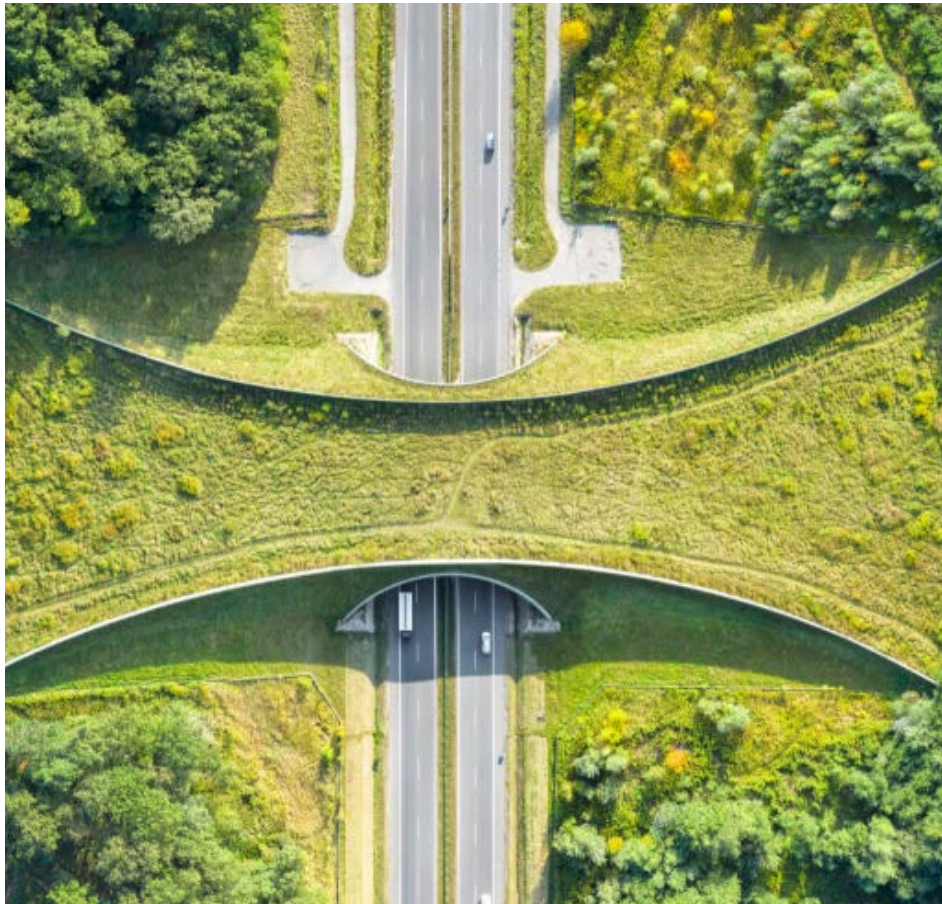
Recommended citation: "United Nations Environment Programme (2024). Circular Economy: from indicators and data to policy-making. Nairobi."

Layout: UNON Publishing Services Section



# 04

## Data Gaps



### 4.1 Unavailable Circular Economy Core Indicators

Four out of the initial list of 15 circular economy core indicators are unavailable (as of October 2023). Considering proxy indicators, only 3 out of 15 indicators are not available. Regarding the various themes of the circular economy framework, data for 22 per cent of the themes are not available, as shown in Table 15.

**Table 15** Circular economy core indicators availability by theme

Framework	Themes	Unavailable circular economy core indicators	Availability out of total proposed indicators
Material life-cycle and value chain	The material basis of the economy		1/1
	The circularity of material flows and the management efficiency of materials and waste		4/4
Interaction with the environment	Natural resource implications		1/1
	Environmental quality implications	GHG emissions from production activities	1/2
Responses and actions	Support circular use of materials, promote recycling markets, and optimize design	Taxes and government support for circular business models	0/1
	Improve the efficiency of waste management and close leakage pathways	Tax rate/tonne landfilled or incinerated	1/2

Framework	Themes	Unavailable circular economy core indicators	Availability out of total proposed indicators
	Boost innovation and orient technological change for more circular material lifecycles	Government and business R&D expenditure on circular economy technologies	0/1
	Strengthen financial flows for a circular economy and reduced leakage		1/1
Socio-economic opportunities for a just transition	Market developments and new business models		2/2

Source: Author's elaboration

Reasons for indicators' unavailability can be summarized as follows:

- Undetermined measurement boundaries for two indicators covering taxes and government support for circular economy business models and research and development expenditure on circular economy technologies. These indicators correspond to the block named responses and actions, which describes the policy and societal responses and actions to shift to a circular economy model.
- Lack of international organisation compiling this information at present or complex methodology, in the case of tax rate/tonne landfilled or incinerated and GHG emissions from production activities respectively.

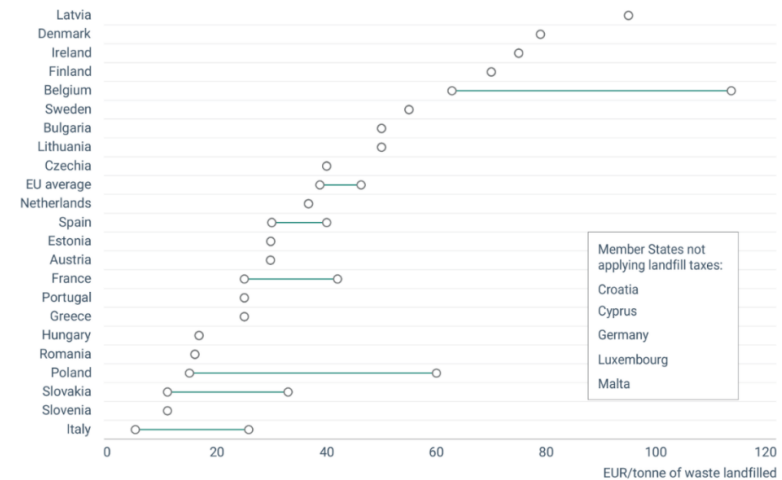
### Box 2 Overview of landfill and incineration taxes on municipal waste used in EU Member States, 2023

The European Environment Agency (EEA) has published a technical note accompanying the EEA briefing "Economic instruments and separate collection – key instruments to increase recycling" (European Environment Agency [EEA] 2023a). The report analyses the use of landfill and incineration taxes in the different European countries and the results are presented in Figure 1 and Figure 2 below.

#### Landfill taxes

The use of landfill taxes is quite diverse among the European countries. 5 countries out of 27 do not apply any landfill taxes (Cyprus, Luxembourg, Croatia, Malta and Germany), while other countries apply different taxes depending on different criteria (type of waste, achieving the goals of recycling by municipalities...). In some cases, for example in Belgium, taxes can vary among regions too.

Figure 1 Overview of the landfill taxes on municipal waste used in EU Member States, 2023



Source: (EEA 2023b)

Box 2 Continued

**Incineration taxes**

Same as for the landfill taxes, the incineration taxes vary among the European countries and regions. 18 countries out of 27 do not use incineration taxes. Taxes in a country may vary depending on the type of waste (waste composition) and region.

Further details are available in the Technical note accompanying the EEA briefing 'Economic instruments and separate collection – key instruments to increase recycling' (EEA 2023a).

**Figure 2 Overview of the taxes on the incineration of municipal waste used in EU Members States, 2023**



Source : (EEA 2023c)

Circular economy indicators are particularly challenging because they refer to a new sector, their methodology is not yet well-defined, and data available from the different sources are scattered. And as a result, already existing data are not enough to fill the information gaps.

To produce the required information, countries need further capacity building to lessen challenges faced during the collection, treatment and dissemination of circular economy focused data. This could be done through the development of training material that focuses on improving data collection methods and better understanding of the international standardized methodologies for the collection and dissemination of circular economy indicators.

Countries are also encouraged to use existing international instruments that could help with data collection and dissemination such as the UNSD/UNEP Questionnaire on Environment Statistics and the Joint OECD/Eurostat Questionnaire. These instruments could be adapted to include more information about circular economy aspects. By including circular economy information into existing instruments, countries would be encouraged to collect and disseminate such data without increasing the reporting burden on national institutions.

Improving the understanding of countries on their progress towards shifting to circular economy is based on having regular collection of data. This would promote evidence-based policy-making and would provide basis for the development of targeted policies at national or sub-national levels.