# Circular Europe How to successfully manage the transition

from a linear to a circular world



# enel

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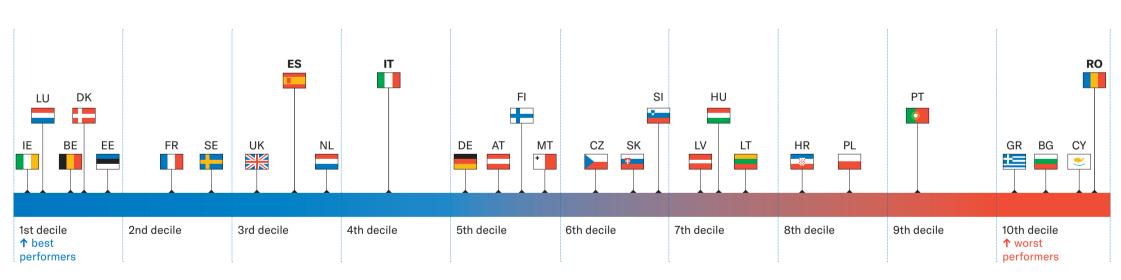


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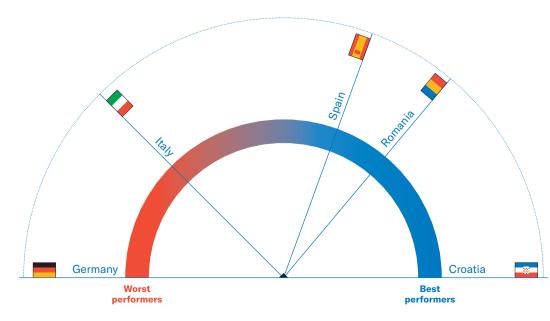
SCAN THE QR CODE WITH YOUR SMARTPHONE TO DOWNLOAD AND READ THE DIGITAL VERSION OF THE STUDY.

## Circular Economy Scoreboard for EU27+UK countries



N.B.: all data are referred to the latest available year (2018).

# Circular Economy Scoreboard - progress made over the period 2014-2018



### **Circular Economy Scoreboard Pillars**





End-of-life





# Extension of useful life

Increase of the intensity of use

Extending the duration of the useful life of products/services Increasing the load factor a single item

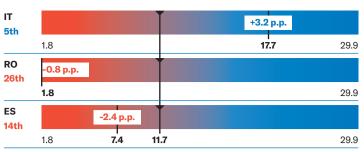
Sustainable inputs

Using renewable energy and recyclable, recycled and biodegradable materials to manufacture goods and provide services in consecutive lifecycles

Recovering end-of-life value of asset, products and materials through reuse, remanufacturing and recycling

## Sustainable inputs

#### • Circular material use rate<sup>1</sup> % values



Energy consumption of electricity in the manufacturing sector % of final energy consumption in the sector

IT 4th	+0	.02 p.p.
	17	<b>41</b> 75
RO 21st	+0.03 p.p.	
21st	17 <b>29</b>	75
ES 13th	+0.01 p.p.	
	17 <b>34 35</b>	75

• Share of energy by renewables % of final energy consumption

IT +0.7 p.p. 14th 7.3 17.7 54.7 RO -0.9 p.p. 10th 7.3 23.8 54.7 ES +0.4 p.p. 15th 17.4 7.3 21.2 54.7

### Water productivity

Euros/m<sup>3</sup> of water extracted

IT 20th		+15%	Ĭ	
	7.9	39.34		1,
RO 25th		+ <b>9</b> %	Ť	
25th	7.9	24.10		1,
ES 22nd		+ <b>12%</b>	Ť	
	7.9	35.30	133.9	1,

Energy consumption of electricity by households % of final energy consumption by households

IT 21st		-0.012 p.p.	Ť		
	11	17			69
RO 26th		+0.03 p.p.	Ť		
	11	14			69
ES 4th			Ť	+0.019 p.p.	
	11		27	43	69

Energy consumption by renewables in the transportation sector % of final energy consumption in the sector

IT 22nd		+0.1 p.p.	
	1.3	3.5	20.4
RO 12th		+0.02 p.p.	
	1.3	4.7	20.4
ES 8th			+0.04 p.p.
	1.3	4.	<b>9 5.2</b> 20.4

#### **Energy intensity** TOE per thousand Euros

IT 8th			Ĭ	-0.5%	
	0.17			0.07	0.04
RO 20th		-0.7%	Ť		
	0.17	0.11			0.04
ES 10th			Ť	-0.3%	
	0.17		0.10	0.07	0.04

**Resource productivity** Euros per tonne of material consumption

IT 4th				T		+10%	
	391					3,601	4,803
RO 27th		+ <b>12</b> %		+			
	391	453					4,803
ES 7th				+	+8%		
	391		1	,971	2,850		4,803

• Share of total organic area in total UAA<sup>2</sup>

% values

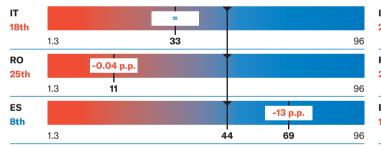
IT 4th					+5.9	9 p.p.	
	0.41				15	.24	24.08
RO 27th		+0.3 p.p.	Ť				
	0.41	2.43					24.08
ES 12th			Ť	+1.9 p.p.			
	0.41		3.66	9.28			24.08

# End-of-life

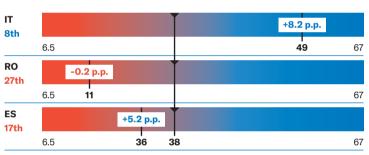
Total generation of waste per GDP unit Kg per million Euros

IT 4th			T	-0.9%
	2,345			<b>104</b> 48
RO 26th		-50%	Ť	
	2,345	940		48
ES 6th			Ť	-0.6%
	2,345		326	<b>117</b> 48

Sewage sludge treated and disposed in agriculture or as compost % values







Patents related to recycling patents per employees

IT 20th		=		
	0.0	0.003		0.0
RO 22nd		=	Ť	
	0.0	0.003		0.0
ES 19th		-		
	0.0	0.005	0.01	0.0

13th

RO

23rd

IT

10th

RO

6th

8.9

8.9

15

2.8

2.8

2.8

• Industrial waste treated by recycling % values

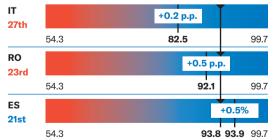
IT 1st		+15 p.p.
	2.9	72
RO 27th	+0.1 p.p.	
	2.9 <b>3.7</b>	72
ES 17th		-17 p.p.
	2.9	<b>35 36</b> 72

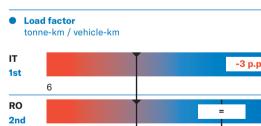
Packaging waste recycled % values

IT 12th			T	+0.4 p.p.	
	39.7			66.9	83.8
RO 21st		+7.6 p.p.	Ť		
	39.7	60.4			83.8
ES 9th			Ť	+1.9 p.p.	
	39.7		64.4	68.5	83.8

# Extension of useful life

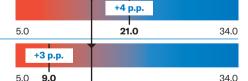
End-of-life vehicles recovered and reused % of end of vehicles scrapped



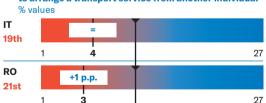


## Increase of the intensity of use

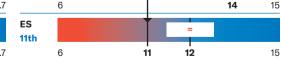
• Individuals using any website or app to arrange an accommodation from another individual % values IT



Individuals using dedicated websites or apps to arrange a transport service from another individual

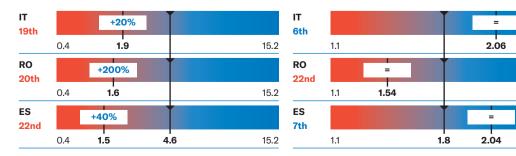


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**Employment in repair and reuse sectors** 

Value added of retail sale of second-hand goods Euros per capita

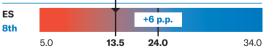


% values

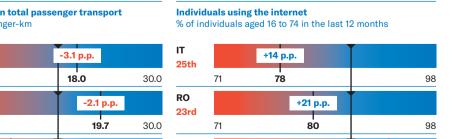
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Variations calculated from 2014 to 2018.

1 Ratio of the circular use of materials to the overall material use. 2 Utilized Agricultural Area.



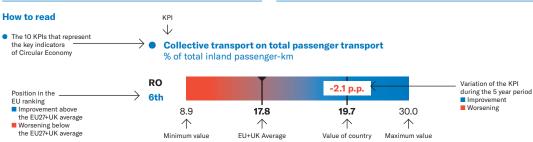
**Collective transport on total passenger transport** % of total inland passenger-km



Value of country

Maximum value





EU+UK Average

Minimum value

