

# Circular Economy in Portugal: policy & practice



# Key numbers

## Urban waste production pc (2014)

PT  
453  
kg/inhab

EU  
478  
kg/inhab

Goal PT  
2020  
10%

## Urban waste landfill rate (2014)

PT  
34%

EU  
~25%

Goal EU  
2035  
10%

## Urban waste recycling rate (2014)

PT  
30.4%

EU  
43.7%

Goal EU  
2025 - 55%  
2030 - 60%  
2035 - 65%

## GHG emissions pc (2014)

PT  
6.48  
tCO<sub>2</sub>/inhab

EU  
8.72  
tCO<sub>2</sub>/inhab

Goal EU  
2020 - 20%  
2030 - 40%

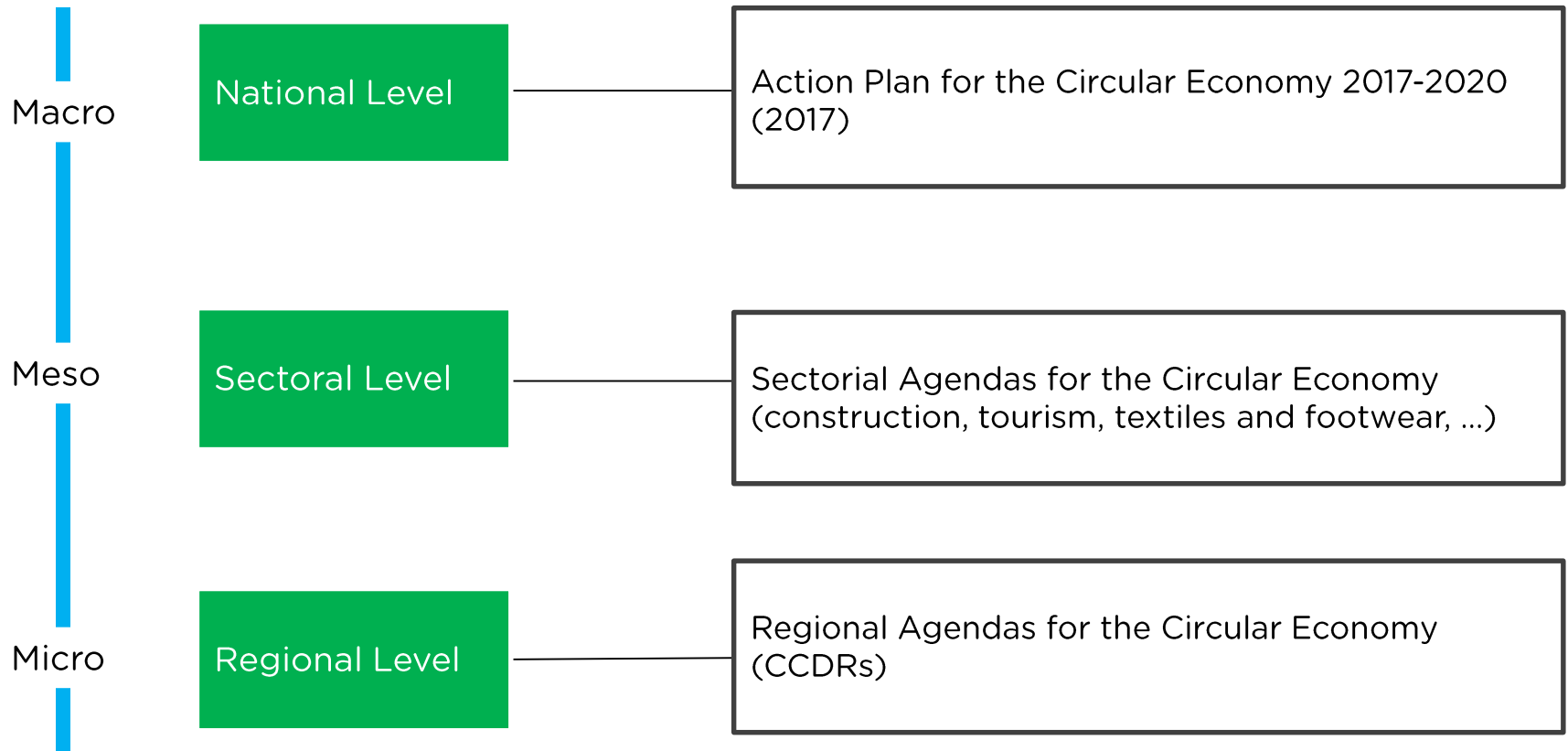
## Share of renewable energy (2016)

PT  
28.5%  
(2015)

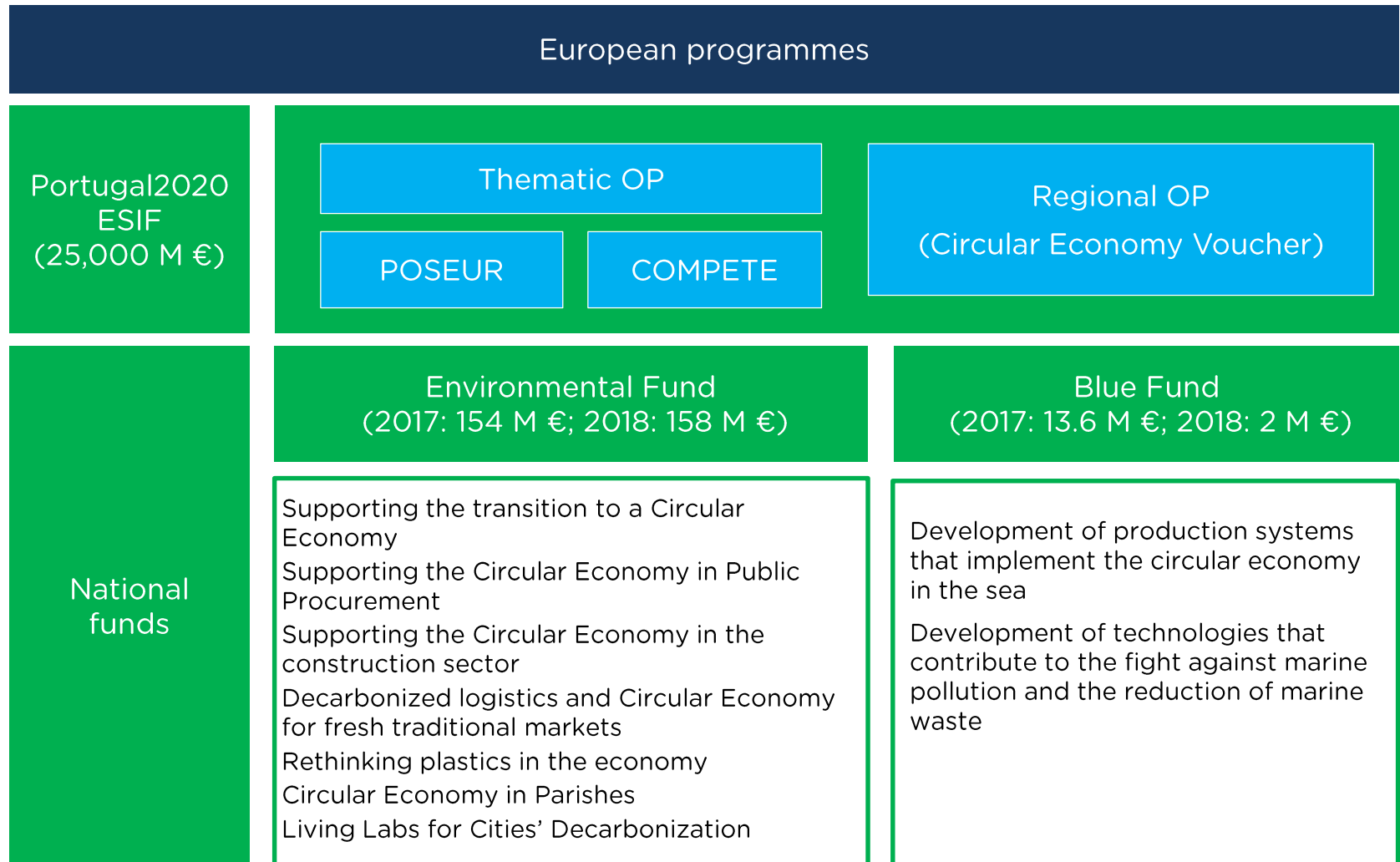
EU  
16.7%  
(2015)

Goal PT  
2020 - 31%  
Goal EU  
2030 - 27%

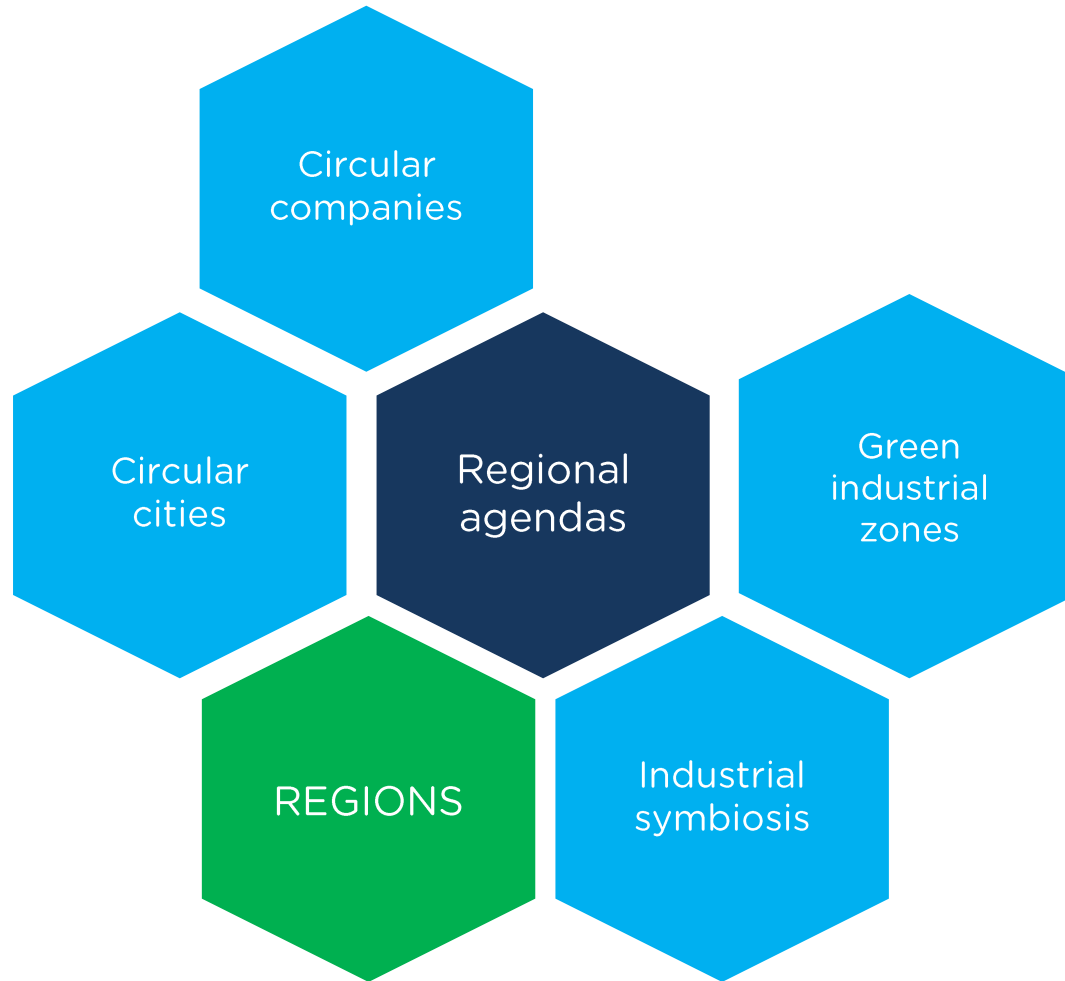
# Policies & strategies



# Funding sources



# Regional agendas



# Towards circular cities

- **Growing importance of cities** – “cities are ideal testing grounds for circular economy models” (WEF, 2018)
- Emerging **urban strategies and action plans**: Roadmap for the Circular Economy of Porto; Mapping Circular Economy in Lisboa
- Emerging participation in **European networks and projects**: Porto (EU Urban Agenda – Partnership on Circular Economy); Lisboa (FORCE – Horizon 2020)
- Some **smart city projects** with an important technological dimension (ICT, big data) promoted by municipalities and companies
- Several **small scale and high impact projects** promoted by municipalities and parishes

# Projects & initiatives

## Smart waste management system – Cascais Municipality



Installation of sensors in waste containers and vehicles, and development of an online management platform

Collection and analysis of real-time data to support decision-making: (ex. route optimization)

Decrease the number of vehicles in circulation (180,000 km), reduction of CO<sub>2</sub> emissions (320 ton/year), 600,000 euro savings per year

# Projects & initiatives

## Pay-as-you-throw system – Guimarães Municipality



Pilot project in the historic center

Citizens only pay for the garbage they produce, encouraging the recycling of their solid waste

Use of electric vehicles for waste collection

34% decrease in unsorted waste and  
126% increase of recyclable waste



# Projects & initiatives

## Waste coin – Campolide Parish (Lisboa Municipality)



Increasing waste recycling rate

Change 1 kg of paper or plastic waste for a “waste coin” (1 €) to be used in local commerce (coffee, fruit, ...)

80 adherent organizations  
(restaurants, coffee shops, drugstores)

# Projects & initiatives

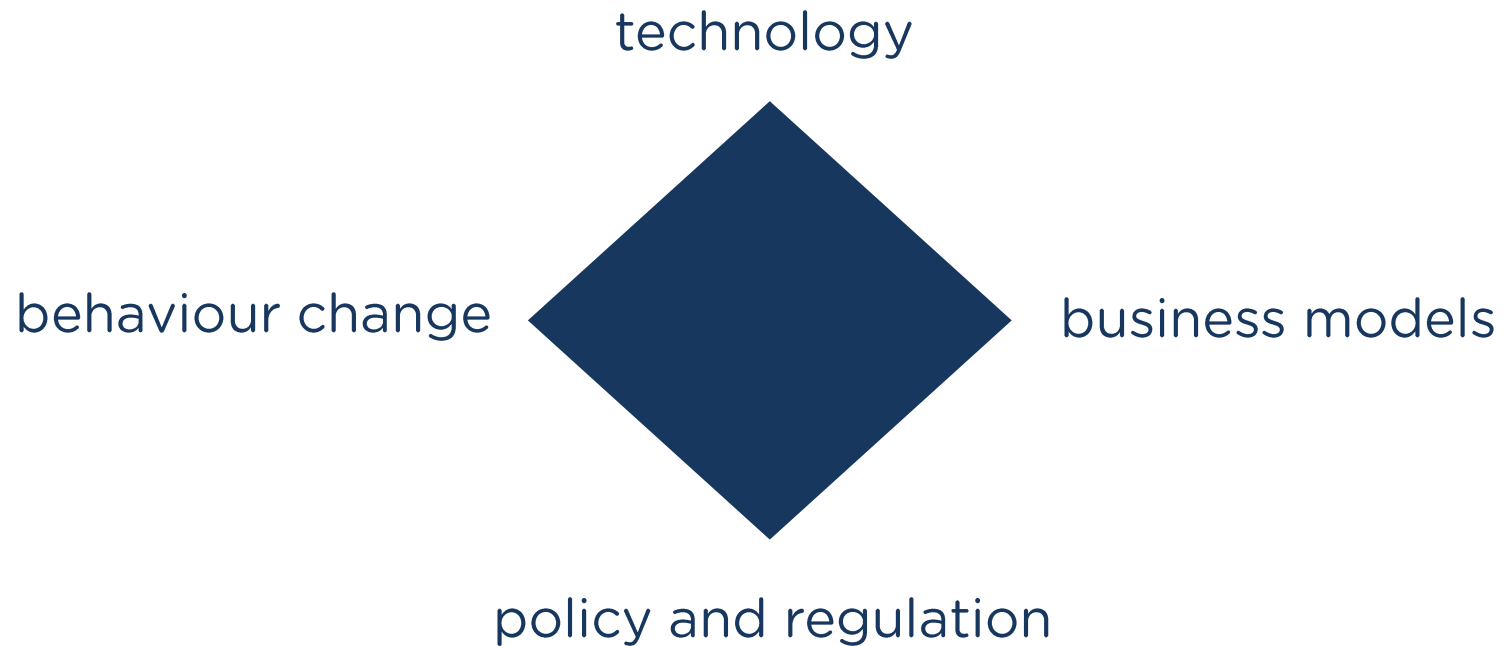
## JUNTAr PASSOs – Passos Parish (Fafe Municipality)



Transformation of plastic waste into urban furniture (tables, walkways, signage,...) by a recycling company in collaboration with the community, to be placed in the urban fabric

# Final note

Digital transformation and collaborative methodologies  
as tools to achieve circular cities



# Contacts

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