



LIPOR Vision in the Path to Circular Economy

LIPOR

Intermunicipal Waste Management of Greater Porto

Fernando Leite | CEO



AGENDA

- LIPOR Vision in the Path to Circular Economy
 - Circular business model and examples of circular practices
- Waste and Circular Economy
 - The role of the waste sector and its importance in circular economy
 - Transition from linear economy to circular economy
- The Case Study – Smart Waste Portugal
 - The challenge turned into opportunity



LIPOR Vision in the Path to Circular Economy

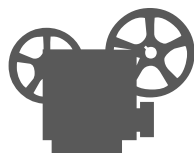


LIPOR Vision



BEING PART OF A WHOLE.

somoslipor





LIPOR Vision

BEING PART OF A WHOLE.

some slipor

LIPOR is People

LIPOR is Partners

LIPOR is Recovery

LIPOR is Innovation

LIPOR is Processes

LIPOR is Products and Services

LIPOR is Resources

LIPOR wants to be a **New Trend** of Management!





LIPOR Vision



LIPOR

Baguim do Monte Unit

(Sorting Plant, Composting Plant, Biogas Plant,
Fotovoltaic Plant, Parque Aventura, Administrative
Services)



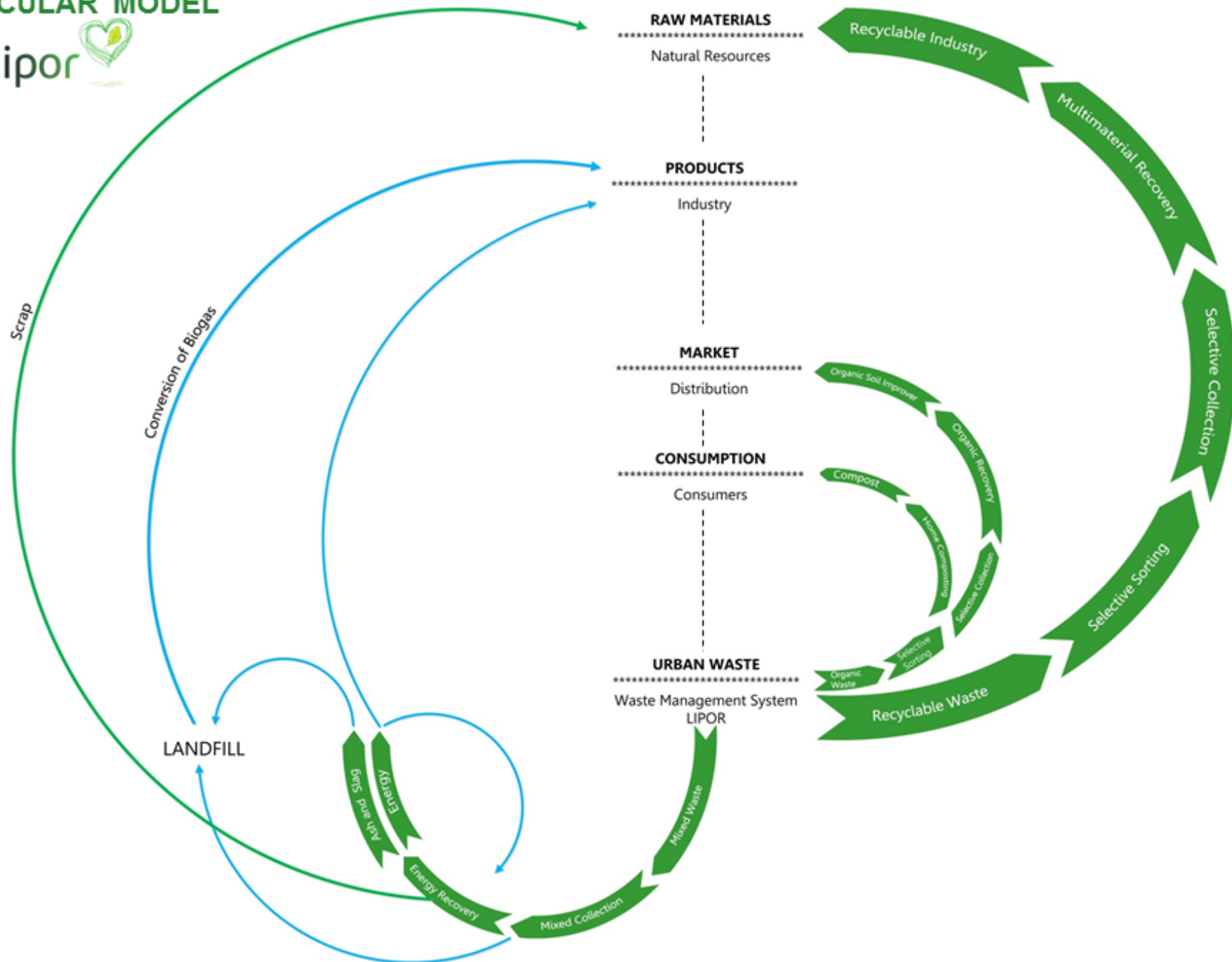
LIPOR II

Maia Unit

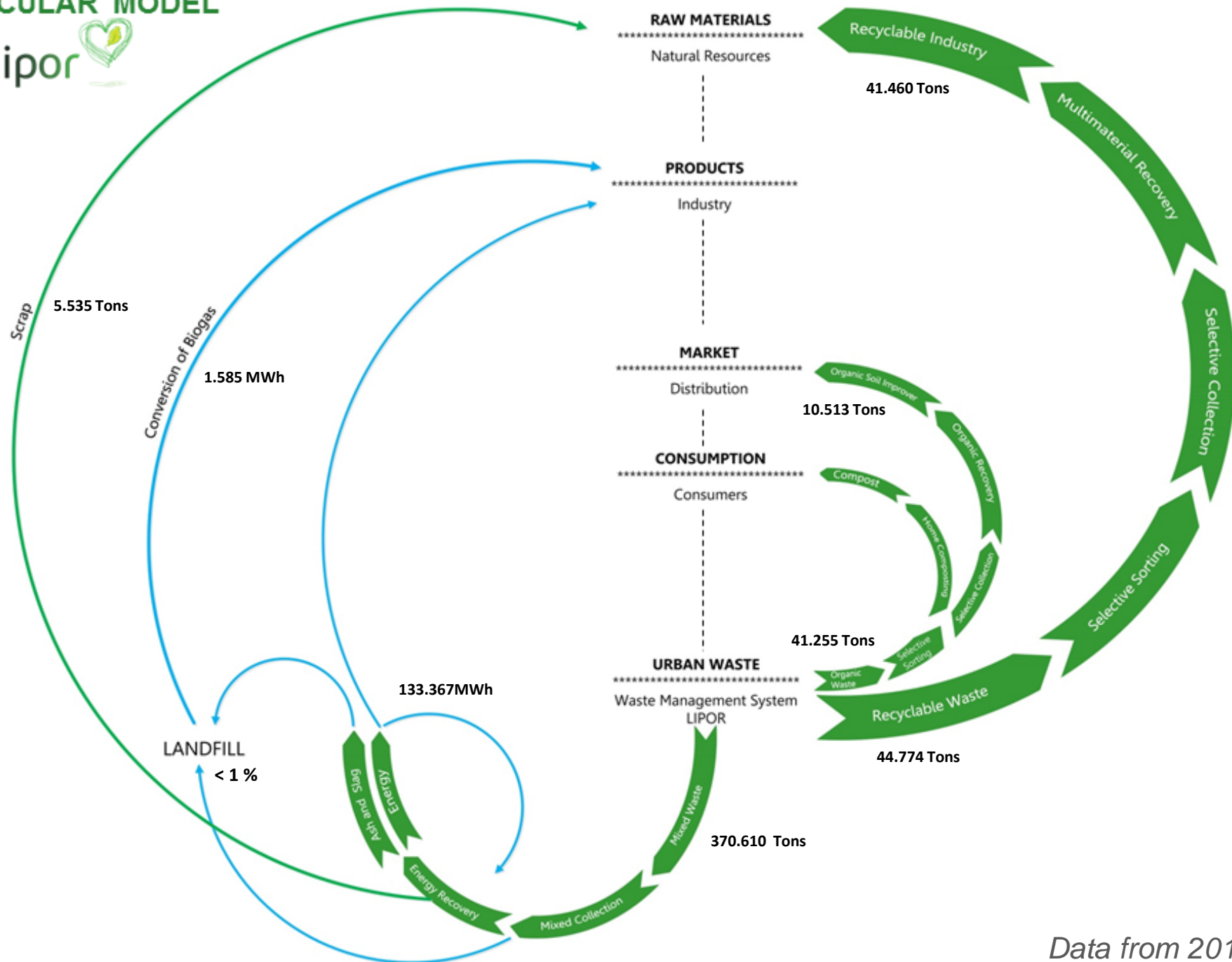
(Energy Recovery Plant and Landfill)

Waste as a **RESOURCE**

CIRCULAR MODEL

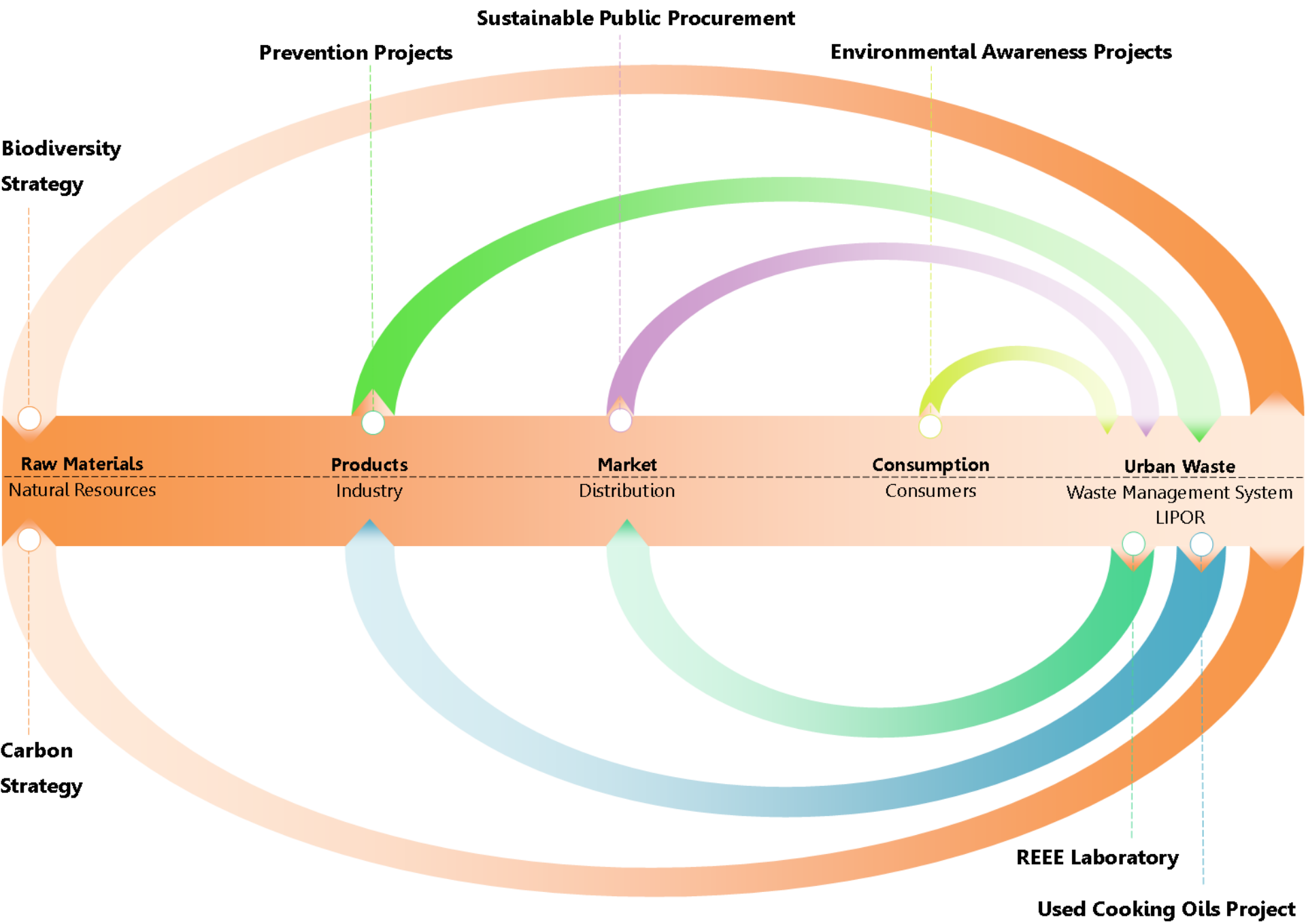


CIRCULAR MODEL



Data from 2014

CIRCULAR PRACTICES



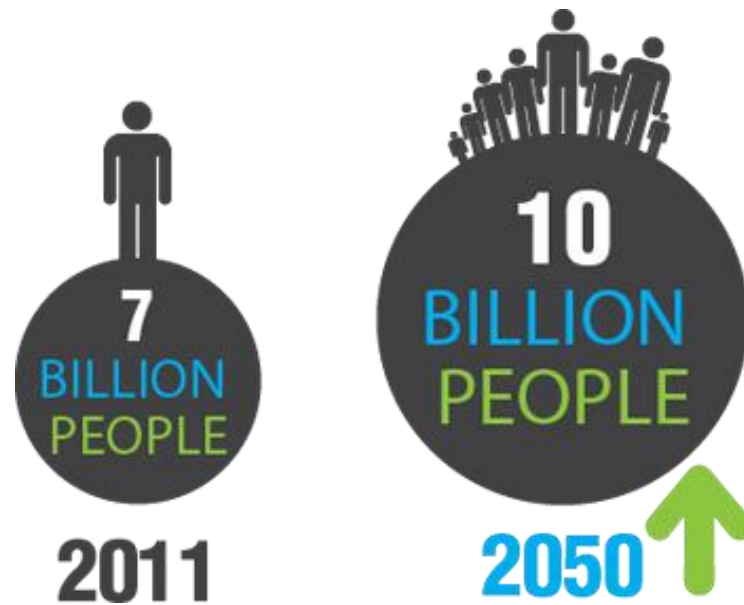


How does the **Waste Sector** can contribute to the Circular Economy?



Context and trends

Context and trends 1 | Demographic base projections

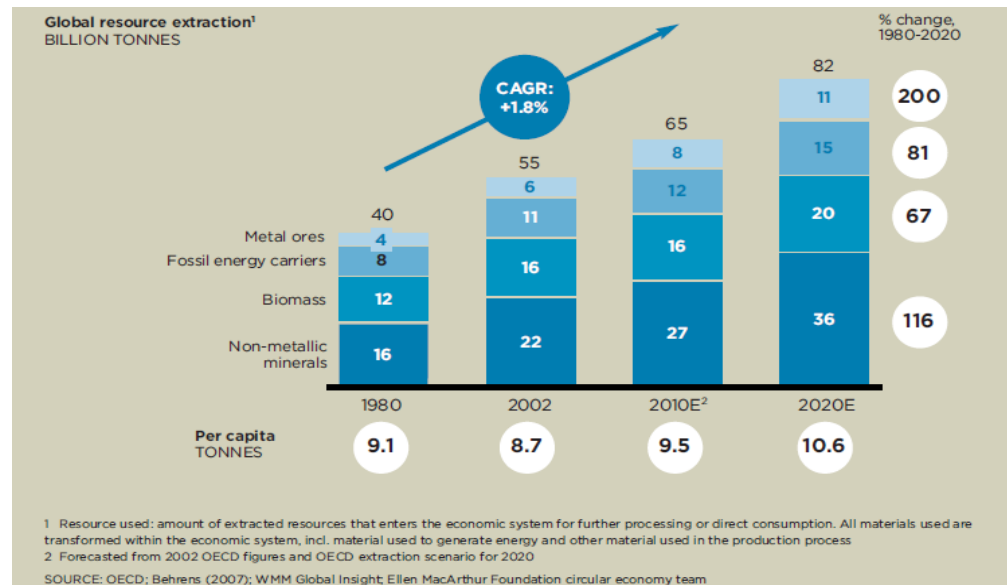


By 2050, the number of inhabitants of the planet is expected to reach 9 billion, with more than 5 billion to belong to the middle class (Kharas, 2010)



Context and trends

Context and trends 2 | Extration of Natural Resources

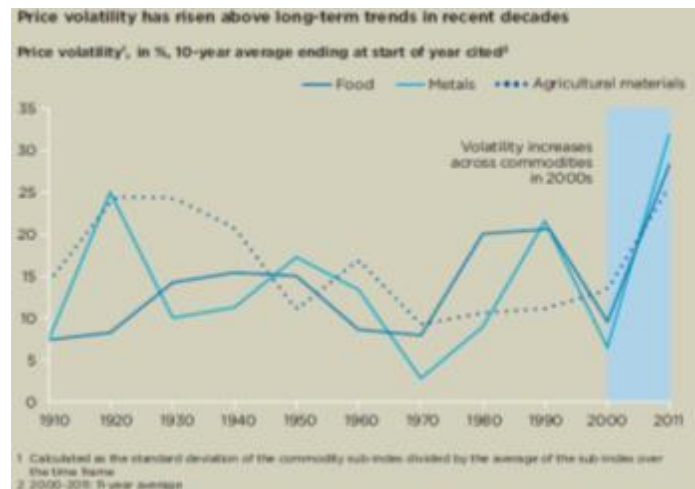


In 2010 it was extracted 65 billion tons of raw materials. In the current system, 80% of these materials have an end of life as waste. For 2020 is expected to increase to 82 billion (Ellen MacArthur Foundation, 2013)



Context and trends

Context and trends 3 | Price Volatility



The levels of **price volatility** (for example, food, metals and agricultural materials) grew strongly in the first decade on 21 century, comparing with any other decade from 20 century (Ellen MacArthur Foundation, 2013)



Transition from linear to circular

LINEAR ECONOMY



TECHNICAL & BIOLOGICAL MATERIALS MIXED UP

ENERGY FROM FINITE SOURCES

CIRCULAR ECONOMY



BIOLOGICAL MATERIALS

TECHNICAL MATERIALS

ENERGY FROM RENEWABLE SOURCES

Source: Ellen MacArthur Foundation



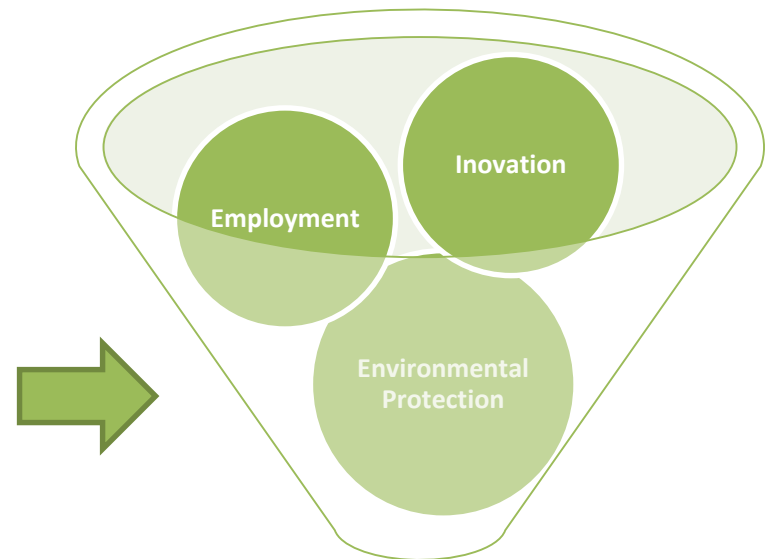
Transition from linear to circular

LINEAR ECONOMY

Based on a traditional chain is to "extract – produce - waste" there is a potential loss of economic and environmental value.

CIRCULAR ECONOMY

Aspires to a greater efficiency in terms of production processes to full the use of natural resources by minimizing waste.

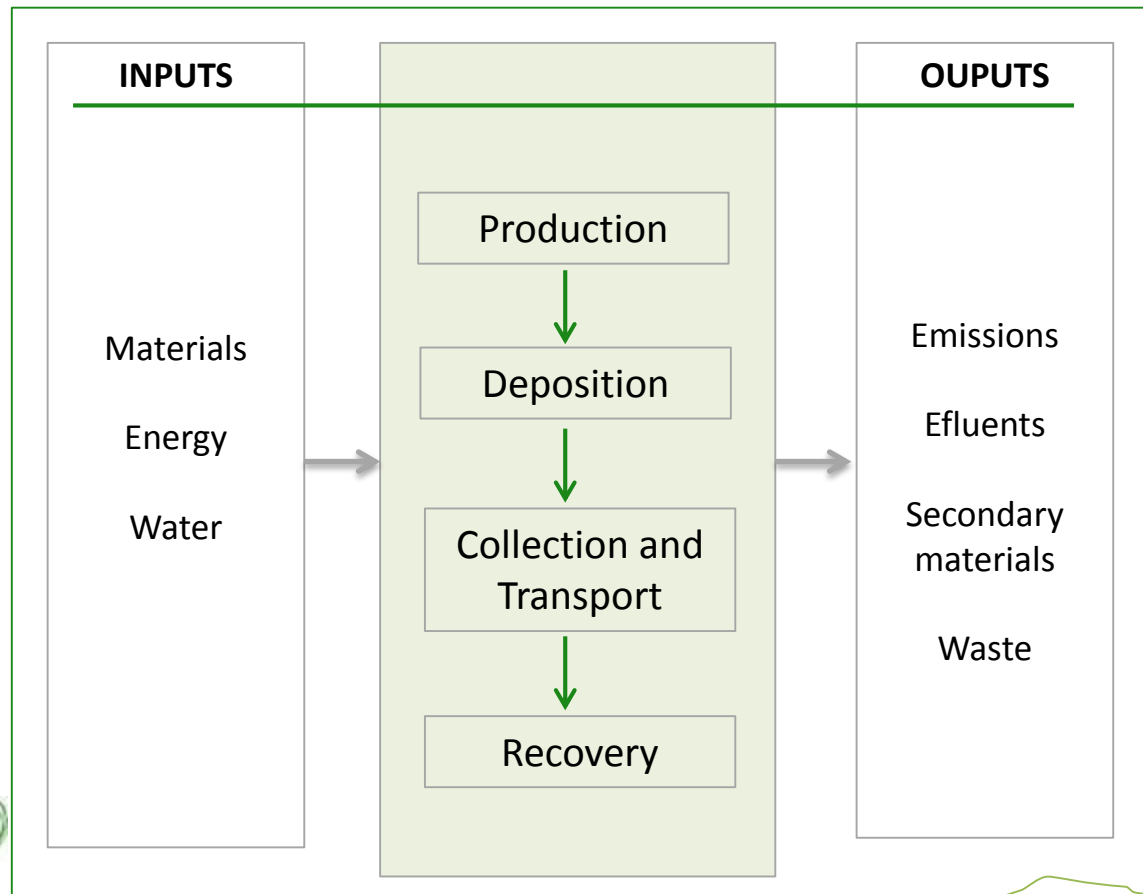


**Economic
Development**



Waste and Circular Economy

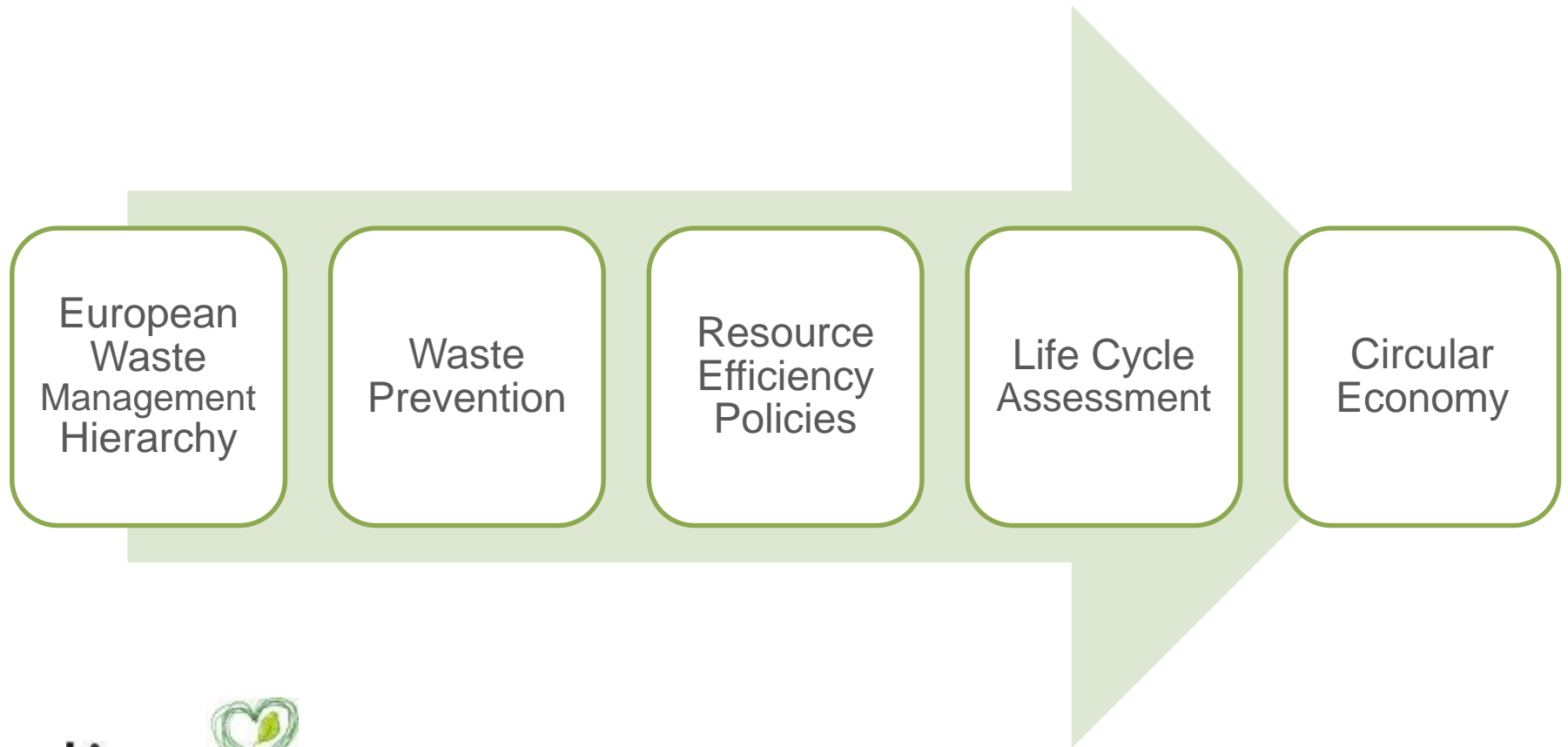
Value Chain





Waste and Circular Economy

European Environmental Guidelines





Rethink Processes

Businesses Tools

Power of Citizens

Challenges

Opportunity



The Case Study – **Smart Waste Portugal**



Challenge into Opportunity

Became recognized
element in the
national economy

Supported by the
dynamics of circular
economy

Directed for the
Internationalization
of the sector

Nacional Context Entities

Waste
Sector

Business Development
Network



SMART WASTE PORTUGAL
BUSINESS DEVELOPMENT NETWORK



Challenge into Opportunity

Estudo sobre a Relevância e o Impacto do "Setor" dos Resíduos em Portugal na Perspetiva de uma Economia Circular

Hermano Rodrigues | 14.09.2015 | SWP (Maia)

Study on the relevance and impact of the waste sector in Portugal by the perspective of circular economy



Smart Waste Portugal

Stimulating cooperation actions between entities operating in the waste area, through a collaborative approach, this platform aims to create green jobs and promotes the entrepreneurship.





Thank for your attention!

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