



# *Ambigroup*

*Waste Management*

*Dismantling*

*Recycling*



# Ambigroup

AMBIGROUP SGPS SA is a holding of environmental, waste processing & recycling companies:

Celebrating 40-year operating

Today work force 650 Workers in 8 Recycling Parks

Group offers an integrated waste management and recycling solution.





# Ambigroup



Ambigroup companies offer an integrated *loop* of processes and solutions, to increase overall **recycling rate**, from different **waste streams**:

WEEE :

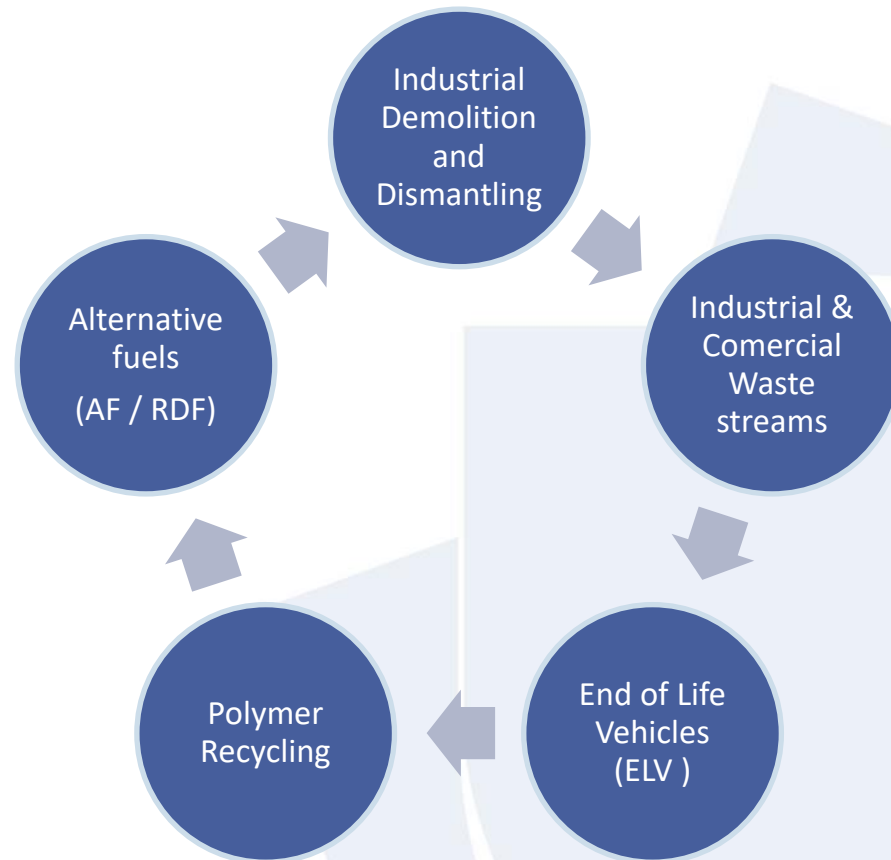
SDA & LDA

Refrigeration Recycling /  
HAVAC

Metal Recycling:

Ferrous (Fe & Stainless Steel)

Non Ferrous: Al Cu Zn & Alloys



## Large Industrial Controlled Demolition

### Examples:

Thermal Power Plant

Tall Structures, Silos

Large Buildings or Warehouses

### Equipment for reuse:

Industrial equipment's

### Recovered materials:

Steel & Stainless Steel

Copper & Alloys

Aluminium

Zinc

Mineral Agregates





Experienced and skilled team

Equipped with “Tools” for each site works:

High Structures Demolition:  
*Demolition Robot*

Onsite Solution:  
Aggregates recycling: *From waste to usable aggregates*

Mobile Equipment :  
*preparation for recycling*



Ambigroup Residuos runs six Recycling Parks:

- Offers an integrated waste management service.

- Non Organic Waste, both from manufacturing production and post consumer.

- Overall Commercial solution, both for positive and negative valued materials/wastes.

- Provides logistic support to waste handling, recollection and transport.

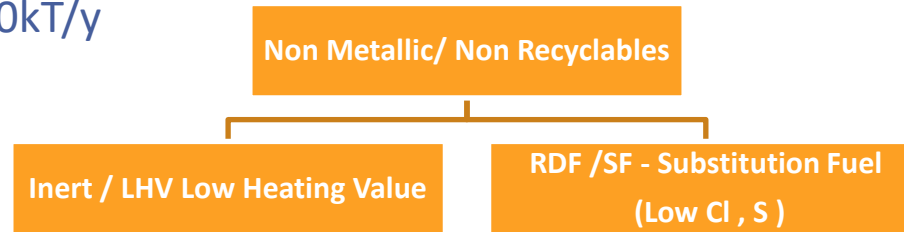
In the parks, Comercial & Industrial Waste is separated, sorted and sent to **Recycling**





Light Non Recyclables with Calorific Valuable material :

3 RDF/AF Lines with 50kT/y



**Industrial Kiln:**  
**Cement kiln**  
**Power plants**



## From Waste to Raw Material

### Matrix – Raw Material / Recycling Equipment/ End Product

#### Raw Material

##### Ferrous Scrap

ELV- Equipment  
(Car Train/ Planes)  
Fe (food containers)  
IBA

##### Non-ferrous:

Aluminium Scrap  
NFe metal  
Al containers

##### WEEE & Polymers

Recycling :  
Waste Stream  
With low metal  
content

#### Recycling Equipment

##### Mechanical treatment:

- Pre Shredder
- Heavy Scrap Guillotine
- 3 x Scrap Shredder
- Light fraction separation
- Magnetic Fe separation
- Eddie currant (ECS)
- Induction Sensors
- Dense Media Plant
- X-Ray Transmission Sorting
- Fines Fe and NFe recovery
- Refrigerator Recycling
- WEEE: SDA/LDA

#### End Products/ Consumers

Ferrous scrap ⇒ Steel mill

Aluminium ⇒ Aluminium  
Smelters/ Refiners

Copper and Alloys ⇒ Copper  
Smelters/ Refiners

Zn, Brass etc. ⇒ Smelters/ Refiners

Plastic Polymers ⇒ Manufacturing

Alternative Fuel ⇒ Cement Kilns



**Ambigroup Reciclagem SA**  
**Seixal Recycling Park**  
**Circular Integrated Recycling Solution**

***Multi Stream Recycling Area - 150,000 m<sup>2</sup>***





## Primary Shredding Unit : Pre-Shredder+ Shredder + SHF and SLF processing





# Sorting Technologies

Induction Sensor - Dense media separation plant - X-Ray Transmission  
Recovery of Metal Fines





# Ambigroup

## Refrigeration Equipment and WEEE

Refrigerator Recycling:

WEELABEX Certification

Maximal Gas recovery

WEEE: SDA & LDA







Ambigroup

Polymers / WEEE / ABS/ HIPS / PP/ PVC

Polymer Processing and Recycling line

WEEE polymers (SDA and LDA)

Refrigerator Polymers

ELV Polymers

Polymers:

PP, HIPS, PP-EPDM, HDPE, ABS, PVC

Dry separation Plant:

Sensor Sorting/ Mechanical

Combination of Sensors (NIR/ VIS/RGB )

Induction Metal Sensor

Increase Polymer Purity & Quality

Introduce Colour Grade Product

Wet System - Density Separation - Flotation





## Ambigroup Renewable Energy / Carbon Footprint

Onsite Solar Power generation  
nearly 50% total power  
consumption

Replacing fossil fuel driven by  
electrical power. 4  
material handlers  
Shredder feeding.  
( 250,000 lt. Fossil Fuel (diesel) reduction /year )

All shredders/ sorting  
equipment are electric  
power driven





# Recycling Value

- Group holds Certifications:
  - EN ISO 9001: 2015
  - EN ISO 14001: 2015
  - EN ISO 45001: 2018
- *EoW* – End of Waste certification:
  - Steel and ferrous scrap
  - Aluminium & Al Alloys
  - Copper & Copper Alloys

*“One Stop” integrated complete recycling solution:  
High Recycling and material recovery rates  
Production of valuable secondary raw materials and products*

More information :

[www.ambigroup.com](http://www.ambigroup.com)

<https://www.youtube.com/user/Ambigroup>