

Production de chaleur et d'électricité décarbonées par pyrogazéification de résidus issus des activités de nos territoires : l'expérience de CARECO ENERGY

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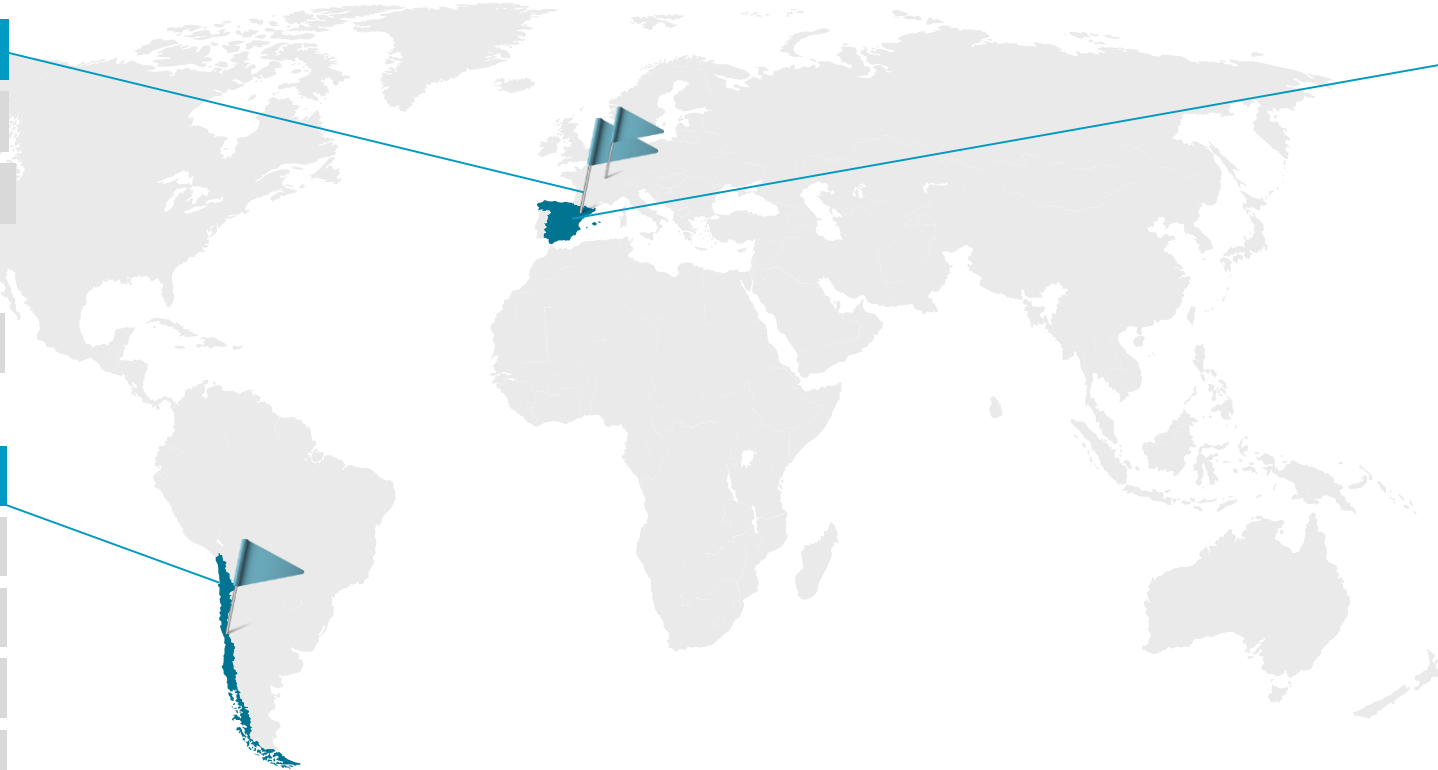
AGENDA

1	COMPANY PROFILE
2	OUR SERVICES
3	OUR MAIN REFERENCES
4	GASIFICATION CASE STUDIES

NEOELECTRA MARKETS – KEY FIGURES

FRANCE	
1	Biomass Plant in Operation
30	MW thermal in Operation
4	M€ Anual Revenues
4	Employees

CHILE	
40	Employees
5	Generation asset
11,1	MWe operation
15	MUS\$ Anual Revenues



SPAIN	
185	Employees
16	Generation assets
190	MWe operation
> 1	TWh commercialized
70.000	Ton CO2 recovered
150	M€ Anual Revenues

Neoelectra Group Central Offices

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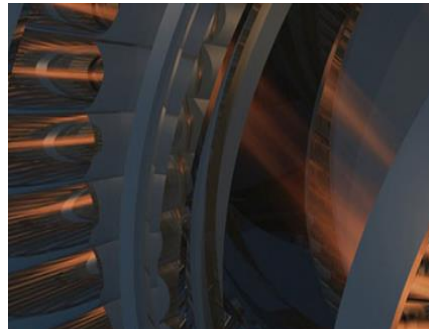
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NEOELECTRA ACTIVITIES



GENERATION

Neoelectra generation is the third independent heat and electrical energy company in Spain, with **205 MW**.

- ✓ 15 cogeneration assets in Spain
- ✓ 2 biomass assets in Spain

- + **11MW** installed in Chile
- ✓ 1 biomass asset in Chile
- ✓ 1 trigeneration asset in Chile



SERVICES

Engineering Procurement Construction and Operation and Maintenance specialists of de industrial plants

Energy services to improve efficiency and reduce costs

Personalised solutions for the **technical services**.

Gasification technology.
Waste to Energy services

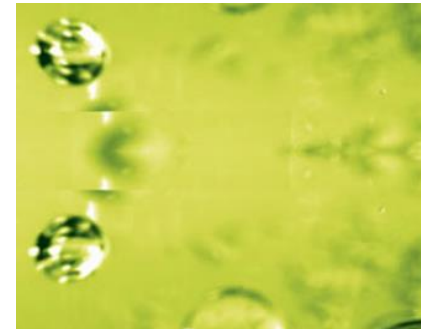


COMMERCIALIZATION

Natural gas and electrical energy supply with flexible supply contracts and indexed

Optimisation of electrical power

Representation of producers



INDUSTRIAL GAS

Patent for CO2 recovery

Neoelectra industrial gases **markets** 70,000 T/year of **CO2**

ISO 22000 accreditation for management of the safety of food products

4 production plants



LOGISTICS

Comprehensive multimodal transportation services (national and international)

Fully loaded, industrial and refrigerated

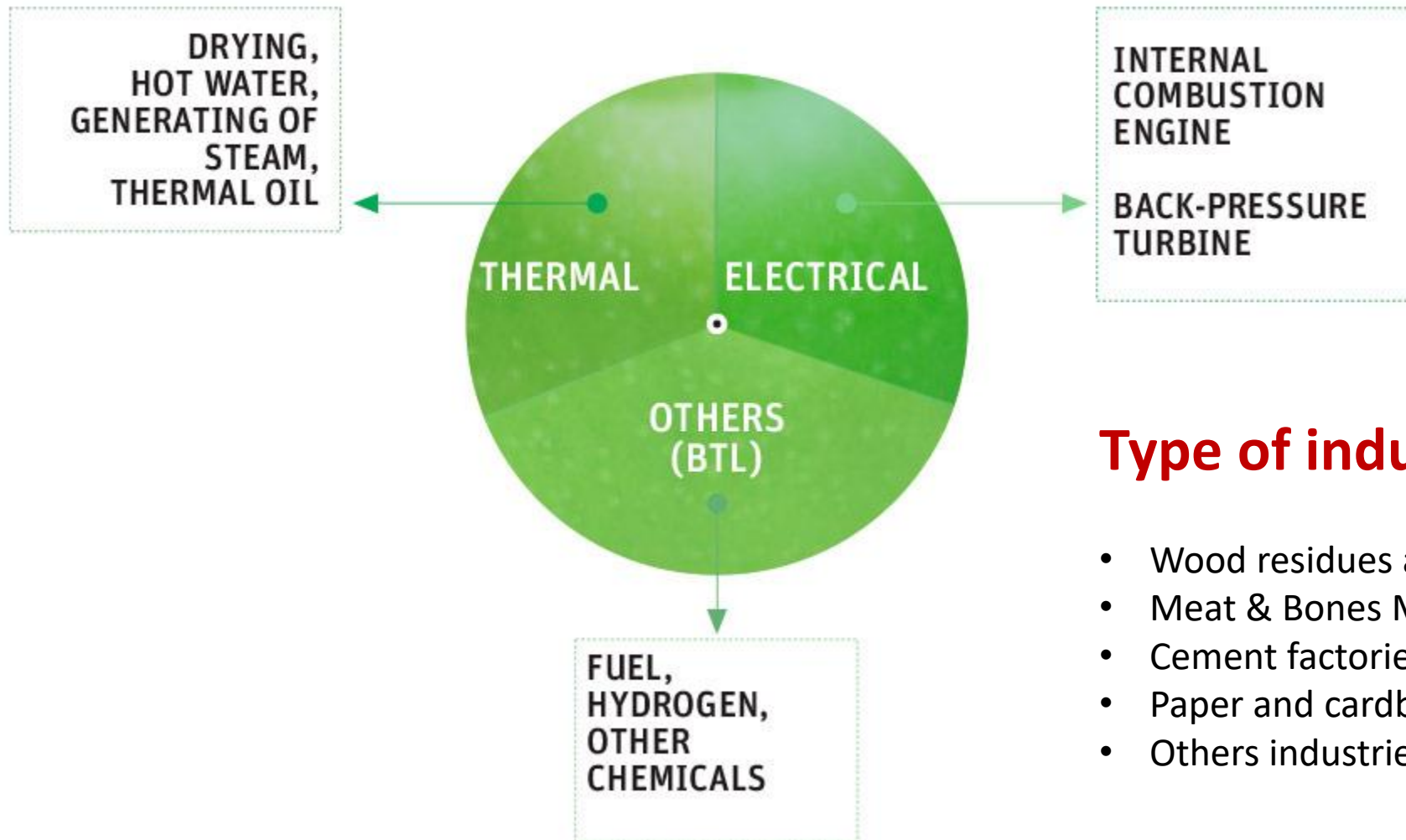


Innovative solutions for sustainable industrial development

GASIFICATION CASE STUDIES



Potential use of syngas



Type of industries

- Wood residues and CSR producers
- Meat & Bones Meals (Rendering)
- Cement factories
- Paper and cardboard
- Others industries

Our services

Processing
of projects

Engineering
(feasibility
studies)

Operating and
maintenance for
O&M (cost
advantages and
working time)

Development
of projects of
producing biogas from
different types of
wastes and
products

We
generate thermal
energy (heat, hot
water, steam, thermal
oil and more),
decreasing fuel
purchase needs

We are a partner
for assessments of
wastes and
by-products

Construction
of “Waste to Energy”
plants, we transform
waste into energy
(power generation,
electricity
production)

Energy synergy
for industries
(energy-intensive)

Environmental
benefits of using
energy:
emission
reduction

REFERENCE: Gasification - São João da Madeira (Portugal)



São João da Madeira (Porto)

Application	Steam production
Combustible	Meat & Bones Meal
Steam Generation	20 Ton/hour
Operating since	2014
Power	16 MWth
Scope	EPC

REFERENCE: Gasification – TAFAP Villacañas (Toledo -Spain)



Térmica AFAP (Toledo)

Aplication	Power Generation (8MWe)
Combustible	Woodchips
Technical Aspects	Wood Gasification & syngas combustion in a torsional chamber
In Operation since	2010 Bought in july 2015 by Neoelectra

Power: 8 MWe

Water-tube boiler with a capacity of **44 Tn/h of steam - 460°C and 40 bar** using double combustion system:

- Gasification of wood in gasifier
- Torsional chamber of syngas
- Torsional chamber of sawdust

More than 8.000h operation per year

REFERENCE: Gasification – Santa Perpétua de Mogoda (Spain)



Santa Perpétua de Mogoda (Barcelona)

Application	Steam Production
Combustible	Woodchips, Plastics, rubber, Residual Biomass and CSR
Steam Production	25 t/h of steam
In Operation since	2018
Power	20 MWth
Scope	Promotion, EPC, O&M including biomass purchase management

Lípidos Santiga: various feedstock entrance



Thanks for your attention !



Specialists in producing biogas from waste and biomass

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pura energía

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We are the partner that your company needs...

- "Waste to Energy" energy recovery from waste and by-products
- Energy partner, specialist in project producing gas from waste and biomass
- The leading company in waste sector with more than 10 years of experience
- Gasification reactors entirely produced by CARECO