

# **CEWEP Country Report 2016**

## **Andorra**



“Municipal Waste” (MW) means waste from households as well as commercial, industrial and institutional waste, which because of its nature and composition is similar to waste from households (excluding hazardous waste).

“Solid Recovered Fuels” (SRF):- solid fuel prepared from non-hazardous waste to be utilised for energy recovery in incineration or co-incineration plants, and meeting the classification and specification requirements laid down in CEN/TS W100343003.

“Refuse Derived Fuels” (RDF): broader than definition of SRF. In the Country Report only RDF expression is used and it comprises SRF as well.

### A. Amount of Waste

In your <u>country</u>	Year 2014	In million tonnes
<b>Total amount of Municipal Waste (MW): MW production / inhabitant / year: ____ kg/inhabitant</b>	71,215	0.071
Total amount of household waste		
Total amount of commercial/industrial/institutional waste similar to household waste		
<b>Total amount of industrial/commercial waste</b>		
<b>Total amount of waste</b>	71,215	0,071

### B. Treatment of Waste

In your <u>country</u> (concerning MW)	%	Year 2014	In million tonnes
<b>Recycling</b> (including composting)	39.9		0.028
<b>Incineration</b>	57.6		0.41
<b>Landfilling</b>	2.5		0.002

Total Amount of thermally treated waste in million tonnes	Country	Organisation/ company
In WtE plants/dedicated RDF plants	0,034	CTRA,SA
In Cement kilns	0	

Number of	Country	Organisation/ company
WtE plants	1	CTRA,SA
Dedicated RDF plants	0	
R1 plants	1	CTRA,SA

Capacity development in your <u>country</u>	Years			
	2017 – 2020		2021 – 2025	
	Additional Capacity, ktonnes	Additional number of plants	Additional Capacity, ktonnes	Additional number of plants
<b>Planned Waste-to-Energy plants:</b>	0	0	0	0
<b>Planned RDF plants:</b>	0	0	0	0
<b>All (if it is not possible to specify separately)</b>	0	0	0	0

## C. Energy production in Waste-to-Energy and dedicated RDF plants

### 1. Total Electricity and Heat production in Waste-to-Energy and dedicated RDF plants

Reference year: 2014 (if data from 2015 are available, please add them and specify the year)

Total Electricity and Heat production	Waste-to-Energy plants and dedicated RDF plants	
	Country	Organisation/company
Reference amount of thermally treated waste in million tonnes:	0,039	CTRA,SA
Number of plants:	1	CTRA,SA
Electricity produced in million MWh/ year	0,017	CTRA,SA
Electricity exported in million MWh/ year	0,014	CTRA,SA
Heat* produced in million MWh/ year	0,004	CTRA,SA
Heat* exported in million MWh/ year	0	

\* incl. heating, cooling and steam

### 2. Recognition of energy produced in Waste-to-Energy and RDF plants as renewable

How much %? (Please indicate if it refers to energy production or waste input): \_\_\_\_\_

Contribution of WtE to the production of renewable energy in your country (%) \_\_\_\_\_

In your country	Electricity	Heat
Market price per kWh in €cent/kWh		
Subsidy or market based instruments (Please specify e.g. green certificates, feed in tariffs)		
Price incl. subsidy or market based instruments in €cent/kWh		

## D. Residues

Reference year: 2014 (if data from 2015 are available, please add them and specify the year)

Slag/bottom ash	Country	Organisation/company
Annual amount in million tonnes:	0,006	CTRA,SA
Method of utilisation or disposal (%): (road construction, cement production, construction block fabrication, landfill)	Road construction	TRACTAMENT I VALORITZACIÓ DE FANGS
Recovery of metals: • Annual amount (%): • Ferrous (F) material extracted (gross weight, %): • Non Ferrous (NF) material extracted (gross weight, %): • Typical composition of the NF fraction (% Al, other NF, inert):	627,68 t (9,79%)	

<b>FGC (Flue Gas Cleaning) residues, (incl. filter dust and boiler ash)</b>	<b>Country</b>	<b>Organisation/company</b>
<b>Annual amount in million tonnes:</b>	0,001	CTRA,SA
<b>Method of treatment or disposal</b> (e.g. stabilisation, salt mine, hazardous landfill site):	Hazardous landfill	ATLAS

### E. Export and Import of MUNICIPAL and SIMILAR WASTE

Into/from your country, reference year: **2014** (if data from 2015 are available, please add them and specify)

	<b>MSW</b>	<b>RDF</b>
<b>Export</b>	0	0
<b>Import</b>	0	0

### F. Responsibilities Public - Private

Type of waste:	Responsibility for <u>treatment</u> : Public/Private	Responsibility for <u>collection and transport</u> : Public/Private	Municipalities' responsibility for <u>monitoring</u> : Yes/No
from private households	Private	Public & Private	Yes
commercial waste similar to household waste	Private	Public & Private	Yes
industrial/commercial waste	Private	Public & Private	Yes
hazardous waste		Public & Private	Yes

### G. Refuse Derived Fuels (RDF)

In your country, reference year: \_\_\_\_\_

1. Amount of RDF/year
  - a. Current Production: \_\_\_\_\_
  - b. Potential: \_\_\_\_\_
2. Experience (market development etc.): \_\_\_\_\_
3. Capacity for mechanical-biological treatment/ year
 

Currently: \_\_\_\_\_

Planned: \_\_\_\_\_

## H. Prices and taxes

### 1. Waste-to-Energy prices for Municipal Waste (MW)

Reference year: \_\_\_\_\_

Average Net fee in €/tonne	VAT (Value Added Tax) rate %

	Tax in €/tonne MW	Tax for export in €/tonne MW	Tax for import in €/tonne MW	Rules to avoid double taxation if MS of destination and of dispatch have taxes	Comments
Incineration					
Co-Incineration					

Waste-to-Energy total price in €/tonne MW \_\_\_\_\_

### 2. Landfill taxes and bans

Reference year: \_\_\_\_\_

Average Net fee for landfilling in €/tonne	VAT (Value Added Tax) rate %	Landfill <u>tax</u> in €/tonne (If landfill tax is planned please indicate when and the amount planned)	Total price for landfilling €/tonne MW	Landfill <u>ban</u> (If landfill ban is planned please indicate when and for what type of waste)

## I. Investment

1. The average investment cost per tonne of annual capacity (for a new plant, considering 15-20 years operation):
2. Investment cost regarding flue gas cleaning system (% of total investment):
3. The average investment cost per MW heat and electricity installed respectively:

## J. Employment

The amount of employment created by the Waste-to-Energy industry

Jobs (full time equivalent) per WtE plant including operation process, administration and outsourced personnel hired on regular basis i.e. during maintenance (reference to total capacity): 31

You can also provide this information in another unit, e.g. jobs per 100,000 t/a capacity