

W2GAS – Waste-To-Compost and Green Energy

2nd Know-how-Event



Regulatory Framework → EU

EU Waste Management Law: [Directive 2008/98/EC on waste and repealing certain Directives](#)

Establishes a legal framework for treating waste in the EU. The framework is designed to protect the environment and human health by emphasising the importance of proper waste management, recovery and recycling techniques to reduce pressure on resources and improve their use.

Key points:

The Directive 2008/98/EC establishes a Waste Management hierarchy:

- ✓ prevention
- ✓ reuse
- ✓ recycling
- ✓ recovery for other purposes (such as energy)
- ✓ disposal.

Regulatory Framework → EU

In December 2015, the European Commission adopted a package of measures aimed at stimulating Europe's transition to a circular economy.

The circular economy package contains four directives adopted by Parliament European Parliament on 18 April 2018 and by the EU Council on 22 May 2018.

The directives were published in the Official Journal (OJ L 150, 14 June 2018) and entered into force on 4 July 2018, and Member States should implement the directives within two years.



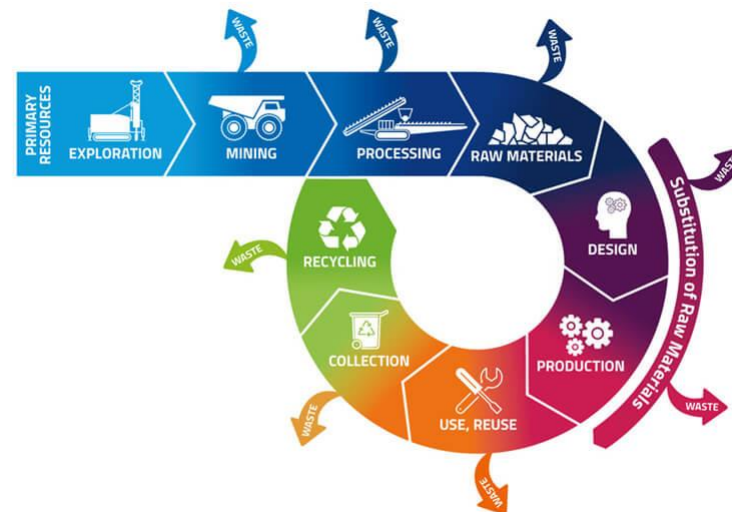
The overall aim of the directives is to improve waste management at EU level.

Regulatory Framework → EU

The legislative package amends:

- ✓ Waste Framework Directive (2008/98 / EC)
- ✓ The Landfill Directive (1999/31 / EC)
- ✓ Directive on packaging waste (94/62 / EC)
- ✓ Directives on end-of-life vehicles (2000/53 / EC), on batteries and accumulators and waste batteries and accumulators (2006/66 / EC) and on waste electrical and electronic equipment (2012/19 / EC).

This will help protect, conserve and improve the quality of the environment and will encourage the prudent and rational use of natural resources.



Regulatory Framework → Romania

Waste framework legislation:

- Law no. 211/2011 on the waste regime, republished in 2014, with subsequent amendments and completions
- Government Decision (GD) no. 1061/2008 on the transport of hazardous waste and safe on the Romanian territory

Waste treatment legislation:

- Government Decision (GD) no. 349/2005 on waste storage, with amendments and subsequent additions
- Law no. 278/2013 on industrial emissions

Emergency Ordinance 74/2018 → Modification of the Law no. 211/2011 on the waste regime and of the Law no. 249/2015 on the management of packaging and packaging waste.

Regulatory Framework → Romania

Planning documents in the Municipal Waste sector:

The planning documents in force in the waste management sector are the following:

- The National Waste Management Strategy for the period 2014 – 2020, approved by Government Decision no. 870/2013
 - ➔ Chapter 7: Energy Recovery
- The National Waste Management Plan for the period 2018 – 2025, approved by Government Decision no. 942/2017
- Large Infrastructure Operational Program 2014 – 2020 (POIM)
- ✓ Priority Axis 6 – Promoting Clean Energy and Energy Efficiency to Support a Low Carbon Economy
- ✓ Specific objective 6.1 – Increase in energy production from less exploited renewable resources (biomass, biogas, geothermal), production

Regulatory Framework → Romania

The National Waste Management Plan for the period 2018 – 2025: Galati County:

- Extension of the separate collection system for recyclable waste → the capture rate: 2020 (52%) → 2025 (75%)
- Construction of a new sorting station with a capacity of 24,000 tons / year
- Extension of the separate biowaste collection system: → the capture rate: 2020 (40%) → 2025 (45%)
- Construction of an anaerobic digestion plant with a capacity of 19,000 t / year,
- Construction of a biological treatment plant with a capacity of 35,000 t / year,
- Closure of the non-compliant landfill (Tecuci Rates)
- Construction of a new compliant landfill.

Regulatory Framework → Biogas Plants

Romania:

Primary legislation → The Energy Law no. 123/10.07.2012 with subsequent amendments and completions.

Natural Gas Sector → The set of activities carried out by economic operators for the production, transport, storage, distribution and supply of natural gas, biogas, biomethane and LNG, as well as the facilities and equipment used to carry out these activities.

Secondary legislation → Order no. 34/31.05.2013: Approval of the "Regulation for granting authorizations and licenses in the natural gas sector".

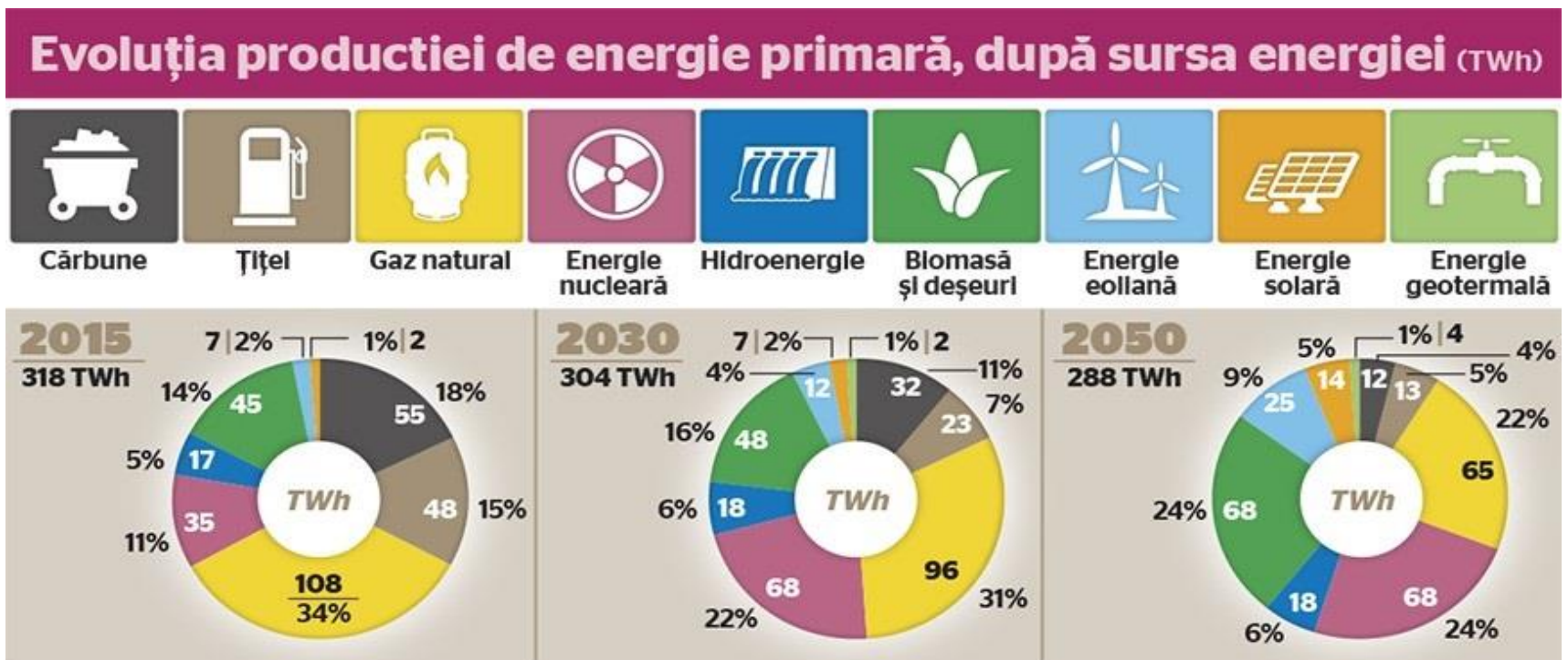
Regulatory Framework → Biogas Plants

Evolution of the installed power → Primary energy source

Primary energy type	2013	2014	2015	2016	2017	2018
Nuclear	1413,000	1413,000	1413,000	1413,000	1413,000	1413,000
Coal	6662,200	6560,200	6560,200	6560,200	6360,200	6360,200
Hydro	6488,026	6496,285	6612,408	6657,585	6678,708	6709,002
Hydrocarbs	4423,955	5159,711	5157,654	5087,056	5048,415	5117,446
Aeolian	678,735	1587,035	2533,495	2762,135	2973,695	3072,920
Solar	1,084	39,267	1142,901	1220,349	1284,304	1367,858
Biogaz	2,650	6,078	7,971	12,193	16,448	16,773
Biomass	23,332	24,732	58,962	88,612	89,950	95,350
Other (waste, geothermal, etc.)	0,000	0,050	4,780	4,780	4,780	4,780

Regulatory Framework → Biogas Plants

The Romanian Energy Strategy [RES] 2016 - 2030 with the perspective of 2050



The forecast regarding the evolution of primary energy production, according to energy source

Regulatory Framework → Biogas Plants



Biogas Plant: Filipestii de Padure, Prahova County



Cogeneration plant Moara: ornicenii Mici, Suceava County



Biogaz plant: Ardud City, Satu Mare County

Regulatory Framework → Use of biogas

Biogas
Applications



Installations with an electro-energetic component (for electricity production)



Installations in which biogas is produced and it's eventually used to ensure the thermal energy

Thank you!



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