



OPEN LETTER

Joint position on the Romanian Ministry of Environment new integrated waste management project

To the Government of Romania, in the attention of:

Prime Minister, Viorica Dăncilă,

Deputy Prime Minister, Minister of the Environment, Gratiela Gavrilescu,

Mr. Minister of Research and Innovation, Nicolae Hurduc,

Minister of Energy Anton Anton,

Minister of Economy, Nicolae Bădălău,

Minister of Health, Sorina Pintea,

Minister for Relations with Parliament, Viorel Ilie,

The undersigned organisations are highly concerned about the [new Integrated Waste Management concept](#) promoted by the Ministry of Environment, via both official statements and via recent visits to the regional and local authorities levels.

According to the Ministry of Environment: *"By launching the [new integrated waste management concept](#), we want to implement the principles of the circular economy so that Romania can become good practice example at the European level. We already are in an advanced stage with the preparation of the two pilot projects that will be carried out next year. Subsequently, the concept will be extended at national level, by developing existing facilities with state-of-the-art technology. Funding will be done through a mix of European funds, the Environment National Fund and local sources."*

We welcome the Ministry's initiative to promote circular economy in Romania. However, the solutions presented as "zero waste" do not comply with the internationally agreed Zero Waste principles. Moreover, the Ministry is lobbying for Waste-to-Energy technologies at both national and local level, in flagrant conflict of interest. The public local authorities are being pressured to adopt the solutions promoted by the Ministry, hindering their exclusive prerogative of choosing the most appropriate waste management solution to the local realities.

We remind the Ministry of the Environment that its main role is to transpose European legislation into national legislation and to promote circular economy principles, in order to provide local public authorities with an effective legislative framework so that they can avoid infringements and associated penalties. The Ministry of the Environment should stop lobbying for technologies with dedication for interest groups and it should, instead, make sure that the law is correctly applied at national and local level. Implementation of concrete measures rests with local public authorities and economic operators, as stipulated by the constitutional principle of decentralization and autonomy of local public administration.

What "new" concept does the Ministry of the Environment proposes?

Regarding waste collection, the Ministry of Environment promotes the same inefficient dual municipal waste collection system with street bins and two waste streams (wet and dry).

Regarding waste treatment, the Ministry proposes Biological and Mechanical Treatment (MBT) stations, inspired by Limassol, Cyprus technology. As of 2028, the materials obtained from treatment at MBT stations will not be included in the reported quantities for recycling targets set by the European Commission. In other words, the MBT facilities favor the perpetuation of the same inefficient *status quo*.

Regarding waste disposal, the Ministry promotes the production of RDF, (alternative fuels from waste), which is the pre-treated fraction of waste, before incineration. The ministry proposes "Waste to Energy" technologies such as pyrolysis, gasification, plasma arc.

Why is the Ministry of Environment strategy not aligned with the EU policy and the Zero Waste principles?

The technologies listed above are misleadingly promoted as "zero waste". In reality, these technologies are excluded from the zero waste definition agreed and promoted by the international and national Zero Waste network. The "zero waste" strategy has been conceived as a set of solutions / measures that, combined, can lead to the avoidance of landfill and incineration of any kind.

By focusing on waste disposal instead of recycling and / or redesigning it, the key principle in the circular economy is violated, namely the objective of preventing and reducing the amount of waste generated.

The measures proposed by the Ministry of Environment supports the same inefficient status quo, which will make it impossible for Romania to achieve the EU targets. Moreover, the Ministry of Environment confuses residual waste with biowaste, which is suitable for compost or biogas and, according to the new European circular economy legislation, must be collected separately, from door to door.

The strategy proposed by the Ministry of Environment promotes Waste-to-Energy facilities, presenting them as profitable solutions for solving the waste crisis. In fact, existing data invalidates the claims that pyrolysis and gasification are the "clean" alternative to conventional incineration, as these technologies also generate toxic emissions and endanger the health of neighbouring communities. These emissions are particularly problematic, especially because Romania does not have an independent standard for monitoring dioxin and furan emissions!

Bellow we present some key arguments that refute the Ministry's proposed solution:

- Burning plastics (including burning gases from gasification) is burning fossil fuels
- Billions of dollars have been invested and lost in gasification & pyrolysis approaches (GAIA 2017 report on billions of lost investments in gasification and pyrolysis, also dioxin and other emissions problems at European facilities)
- These processes do not work as promised and waste time & resources that should be spent developing real solutions--namely plastic reduction
- Even if those pollutants are successfully captured or neutralized, *they must go somewhere*, either into the product itself or into byproducts such as fly ash, char, slag and waste water
- According to a 2012 study commissioned by the ACC, one major problem with pyrolysis is the amount of residual waste produced that may call for landfill disposal of about 15 to 20 percent of the overall feedstock used in the process.
- Mixed wastes that are treated via pyrolysis and gasification generate emissions of persistent organic pollutants (POPs), including dioxins and polychlorinated biphenyls (PCBs), as well as lead, arsenic, mercury, hydrocarbons, carbon monoxide, NO_x, SO_x.
- Existing technologies allow these emissions to be captured in ash, slag and waste water, that need further special treatment to control toxicity, as well as safe storage;
- According to a recent study, waste derived fuels produced from pyrolysis generate more emissions than diesel, more sulfur than gasoline and diesel, plus dioxins and heavy metals;
- Modern technologies for the control of the air pollution cannot prevent emissions and cannot avoid the damage caused by fuel gas acidity to the equipment;
- In order to obtain energy from waste, pyrolysis needs a very high initial energy input, both in the waste pre-treatment stage (bio-drying MBT) and also for maintaining an oxygen-free environment, both processes being highly energy consuming;
- Waste-to-energy technologies have high operating costs and generate very few jobs, compared to programs focusing on prevention, reuse and recycling;
- Waste-to-energy technologies have failed to generate the initially estimated amount of energy and revenue. In addition, they have reportedly exceeded the emission limits in many cases; in practice, such installations were heavily subsidised via public funding;
- The cost of pyrolysis energy is almost triple compared to photovoltaic energy: 1 kw of pyrolytic energy costs between \$ 8,000 and \$ 11,500;
- "Energy-in-waste" technologies are not compatible with circular economy, because they are supporting a linear system, based on the extraction, exploitation, consumption and then destruction of resources.

Another argument against the proliferation of waste-to-energy facilities, is that if the recycling targets at European level are to be reached, the amount of residual waste will not have sufficient calorific capacity to support such facilities, which normally need to be fed for 20 to 30 years to recover the initial investment. The immediate consequence is **an increase in the import of waste from abroad, or/and in the incineration of the waste collected for recycling purposes.**

In the long run, the investment in waste-to-energy facilities will prove to be not only polluting but also unprofitable, wasting citizens' money.

In conclusion, if the EU targets on separate collection and recycling are met, the remaining residual waste will not have enough calorific capacity to support energy-using technologies, that normally need to feed over 20-40 years in order to recover the investment. The consequence of this will either be the import of waste and the transformation of Romania into Europe's landfill, or the incineration of the waste collected separately for the purpose of recycling, or at worst both scenarios combined.

In the long run, investing in these facilities with or without energy recovery will prove not only polluting but also unprofitable, resulting in an increase in the waste management fees, wasting citizens' money.

How can the Ministry of Environment support the transition to a circular economy?

The Ministry of Environment should propose measures for waste prevention and efficient door to door separate collection of recyclable waste including biowaste, in line with the EU Circular Economy Package and the zero waste strategy.

To achieve the **PREVENTION** goals, we recommend investments in:

- **Research:** Establishment of research centers for analyzing residual waste stream and identifying non-repairable, non-reusable, non-recyclable or non-compostable waste in order to pressure the industry for redesigning or stopping the production of such items;
- **Infrastructure:** Urban mining centers for collection of bulk waste such as furniture, construction and demolition waste, electronic, electrical waste etc., focusing on repairs, re-use, resell back to other users and recycling;
- **Industry:** Individual Producer Responsibility Schemes, take-back programs, eco-design requirements for new products entering the market (production of durable products / design for repairability, reusability, recyclability);
- **Tax incentives** to encourage preventive measures among entrepreneurs and other businesses: funding schemes via structural funds for business and social circular models, government aid for ecodesign services and products and for repair networks (tailors, shoemakers etc), VAT reductions for repaired products / materials, zero waste stores, local craft products; penalties/single-use products taxation of ban, except for medical products or other products with a special regime;
- **Education** for responsible consumption.

For an efficient **WASTE COLLECTION** of high quality resources for material recycling we recommend:

- Waste separation at source for at least 5 streams (metal/plastic, paper/cardboard, glass, biodegradable, residual/mixt);
- Separate collection of sorted waste, at source, programmed in different days;
- Financial instruments: pay-for-what-you-throw (PAYT). We recommend the implementation of PAYT after creating a functional door-to-door collection system.
- Education, monitoring, fines.

We propose the **WASTE TREATMENT** according to the particularities of different kinds of waste:

- **Biodegradable waste:** support for home composting programs, investments in industrial composting plants (aerobic treatment), bio-digestors (anaerobic treatment), biofuel production plants from used cooking oil;
- **Recyclable waste:** Increasing recycling capacity especially for glass;
- **Residual waste:** Investments in MRBT stations (Material Recovery, Mechanical-Biological Treatment) to a more efficient management of the residual waste stream and increase the amount of recycled materials instead of Mechanical-Biological Treatment (MBT) plants that produce RDF for incinerators or cement kilns.

Currently, Romania has the opportunity to implement more rapidly strategies for the transition to the circular economy. This outcome is possible because Romania generates about 40% less waste compared to the northern or western countries and does not yet have waste-to-energy facilities for municipal and assimilable waste treatment.

Therefore, we urge the **Ministry of Environment and Romanian Government:**

- To abandon the plan to build Waste-to-Energy facilities, if they truly aim to comply with the targets assumed at European level and to avoid imminent infringement penalties;
- To comply with the EU Commission's recommendations promoted by COM 34/2017, regarding the role of Waste to Energy in Circular Economy and to avoid the public funding for the construction of waste-to-energy installations, inefficient, expensive and toxic on long term;
- To comply with the legal obligations regarding the public consultation of all stakeholders, on a non-discriminatory basis, including environmental NGOs;
- To adopt and support real zero waste solutions, in order to ensure the protection of the environment and citizens' health.

The undersigned organisations request the Ministry of Environment to take into consideration the points highlighted above to ensure the waste management plans promote the transition to a truly circular economy in line with the recently adopted waste legislation.

Signatory organizations,

1. Energy Justice Romania
2. European Environmental Bureau
3. Global Alliance for Incinerator Alternatives
4. Zero Waste Europe

5. Agent Green
6. Asociația 2Celsius
7. Terra Milleniul III
8. Zero Waste Romania



Global Alliance for Incineration Alternatives (GAIA) is a worldwide alliance of more than 800 grassroots groups, non-governmental organizations, and individuals in over 90 countries whose ultimate vision is a just, toxic-free world without incineration.

The European Environmental Bureau (EEB) is the largest network of environmental citizens' organisations in Europe. It currently consists of around 150 member organisations in more than 30 countries (all EU Member States plus some accession and neighbouring countries), including a growing number of European networks, and representing some 30 million individual members and supporters.



Zero Waste Europe (ZWE) is an umbrella organisation empowering communities to rethink their relationship with resources. It brings together local Zero Waste groups and municipalities present in 28 EU countries. Currently, ZWE is the only pan-European organization specializing in waste issues from prevention to disposal and from local to European levels.

Energy Justice Romania is a national alliance of 20 grassroots groups that support communities endangered by incinerator, Waste to Energy facilities and landfills.



2Celsius is a European environmental organization that acts on two geographical patterns: 2Celsius Network and 2Celsius Association. 2Celsius Association is focused on local issues, that entangle non-formal environmental education, climate change policies, sustainable development in an ecological perspective and trainings for young people in Romania.

Zero Waste Romania (ZWRo) is a national, independent, network formed of grassroots groups, organisations and experts specialised in circular economy and waste management.





The **AGENT GREEN association** is a Romanian non-governmental and non-profit organisation, founded in 2009, dedicated to protecting the environment, and focused on investigating environmental crimes, strategically exposing these crimes and promoting solutions for protecting nature and ensuring the well-being of future generations.

Terra Mileniu III is an environmental protection organization that promotes sustainable development programs at national and international level in the field of energy, transport and climate change.



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