Waste Hierarchy in Action. Italian and European Models for a Sustainable Future

Policy Brief

Executive Summary

Italy and the European Union are facing urgent challenges in waste management. Although the waste hierarchy principle lies at the core of environmental policies, **its practical implementation remains uneven and insufficient**. Waste generation continues to rise, decoupling from GDP is still incomplete, and many valuable materials end up in landfills or incineration.

This brief summarizes scientific evidence and exemplary case studies, providing concrete recommendations for policymakers engaged in the ecological transition.

Context: An Incomplete Transition

Directive 2008/98/EC introduced the waste hierarchy: prevention, reuse, recycling, recovery, and disposal. However:

1. Only **48%** of municipal waste in Europe is recycled (Source: Eurostat, as of 2023);
2. In Italy, waste generation **increased** despite GDP remaining stable between 2010 and 2022 (European Environment Agency, 2025);
3. Prevention and reuse remain **marginal** in both statistical reporting and active policy measures;
4. Regulatory, economic, and cultural **bottlenecks** persist.

According to the European Environment Agency, without a radical acceleration in prevention and reuse efforts, the EU's 2030 and 2035 targets are at **risk**.

 ISBN 9788835183266

Evidence and Best Practices

Three virtuous steps, six emblematic cases:

- **Prevention**: Paris and the "Ambition Zéro Plastique à Usage Unique" initiative in preparation for the 2024 Olympic Games.
- **Reuse**: Alelyckan (Sweden), ReTuna (Sweden), and Daccapo (Tuscany): centers for repair and circular commerce.
- **Separate Collection and Recycling**: Ecoambiente (Rovigo) and Revet (Tuscany): high-performance separate collection systems combined with innovative facilities enabling effective recycling.

Enabling Factors

- Clearly stated and formalized political commitment (e.g., manifestos, approved plans)
- Involvement of skilled and motivated managers and consultants in both the design and implementation phases
- Motivated stakeholders (employees, citizens, suppliers) supported by clear, effective, and inclusive communication
- Dedicated human and financial resources
- Project flexibility and adaptive capacity

Structural Barriers

- Lack of clear and incentivizing regulations
- Lobby politiche e industriali resistenti al cambiamento Political and industrial lobbies resistant to change
- A prevailing tendency to assess investments solely in terms of economic and financial returns, without accounting for environmental and social impacts (value for money logic and the triple bottom line)

Recommendations for political action

1. Make eco-design mandatory and promote repairable and durable products through the Minimum Environmental Criteria (CAM).
2. Investing in territorial reuse centres that are affordable and accessible to everybody.
3. Introduce effective economic levers: pay-as-you-throw (PAYT) schemes, eco-taxes on single-use packaging.
4. Reform waste management governance, enhancing coordination and shared responsibility.
5. Launch national and local environmental education campaigns focused on prevention, reuse, and high-quality waste sorting.

Concrete Actions

Policymakers can immediately initiate targeted and feasible actions based on existing legal and financial frameworks. Specific regulatory amendments at the regional and municipal levels can strongly support waste reduction (e.g., banning unnecessary giveaways and disposable items at sports events, fairs, schools, and canteens), encourage the creation of reuse centers, and promote the use of second-hand goods (in connection with social services, for school creative workshops, for adult education or social reintegration). Truly circular public procurement practices can be promoted, and synergies among municipalities and sectoral companies fostered. At the national level, CAM adoption could be made mandatory, with strict performance criteria focused on reduction, reuse, and actual recycling outcomes.
Furthermore, reforming the tariff system is a viable step, linking citizens' waste production to their economic contributions through PAYT models. In parallel, innovative public campaigns at the local level – featuring public meetings, video creation, social media outreach, and the systematic inclusion of environmental education in school curricula – can foster a broad cultural shift. When integrated and supported over time, these actions can bring the waste hierarchy principles into immediate and tangible practice.

Conclusion: A Transformative Vision

Implementing the waste hierarchy is not merely a technical or environmental priority, but a political vision and choice. The case studies examined demonstrate that it is indeed possible to reduce waste, support local economies, and improve community well-being.

Public administrations play a pivotal role – as regulators, as partners in virtuous initiatives, and as purchasers. Public procurement, Green Public Procurement (GPP), and extended producer responsibility policies must become active tools of transformation, promoting not only recycling but also reduction and reuse.

The time for waiting is over: ambitious projects must now be widely launched by municipalities, regions, and companies. Clear and effective rules, together with targeted and dedicated investments, are essential to support Italy's full transition toward a circular economy. The models to replicate already exist – what is needed now is determination and consistency.