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INTEGRATED RESOURCE AND WASTE MANAGEMENT

AN INDUSTRY CONTRIBUTION FOR THE IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT

UNICE POSITION PAPER

UNICE holds that it is time to reconsider EU waste management policy and refocus on the central issue, which is the optimum utilisation of resources - as required by the concept of Sustainable Development - and offers a new approach entitled "Integrated Resource and Waste Management".

1. Background

UNICE has been working for some time on proposals for addressing the principles of Sustainable Development in the European waste management strategy. An initial paper on the subject was circulated in January 1998 and the concept of Integrated Resource and Waste Management was developed further at an internal UNICE workshop held on 8 October 1998. This paper reflects the results of that workshop and is intended to form a basis for further intensive discussions with the European Commission and the Member States of the European Union.

The current EU Waste Management Strategy, which is based on a "Waste Hierarchy" and a series of principles¹, including the Proximity, Self-Sufficiency, Shared Responsibility, Polluter Pays and Precautionary Principles, was originally conceived with the purpose of eliminating criminal waste dumping, overflowing landfills and inadequate waste handling facilities. Many of these goals have - within the constraints of member state implementation - been achieved or are within reach of achievement. At the same time, however, there have been serious side-effects of the EU Waste Management Strategy - due in part to design faults in the policy itself and in part to inconsistent interpretations and implementation deficits in the member states - which have led to waste of valuable resources, unintended environmental impacts and distortions in the market for secondary raw materials. The most recent revision of the European waste strategy, as well as the Fifth Environmental Action Plan make reference to "sustainability" and "sustainable development". These concepts need to be more fully integrated into the EU waste policies and strategy with their three components: environmental, social and economic acceptability.

According to the "Waste Hierarchy", for example, highest priority is given to waste prevention under the mistaken assumption that this is always the option with the smallest environmental impact. In fact, many examples can be given where waste prevention measures result in higher consumption of energy or other resources, increased air or water emissions or a less efficient production process. On the other hand, a so-called waste can be a valuable raw material in a second process step or a different

¹ EU Treaty (Article 130r and 130s).

production process, with the result that the net environmental impact of the two processes is lower than if measures had been taken to avoid generation of the waste in the first process.

Further areas where current policy or its implementation hinders optimum resource utilisation, prevents investment in modern recovery facilities and encourages mismanagement by local authorities are named in the Annex to this paper.

Industry has invested large sums of money in improving its plant and facilities to the point where the environmental impacts of production operations (including waste generation) are a small fraction of what they were ten or fifteen years ago. The waste management sector has also developed rapidly over the same time period and is now able to provide sophisticated resource management services to industry, local authorities and the consumer. The European legislative framework does not take adequate account of this new situation.

2. The Concept

UNICE recognises that the disposal of waste, particularly hazardous waste, has to be controlled to protect the public and the environment and reaffirms its commitment to close cooperation with the European Commission and the other institutions of the European Union in the legislative process.

The inclusion in the waste definition of not only wastes for disposal but also wastes for recovery has resulted in a great deal of problems of the kind mentioned above. UNICE holds that it is time to reconsider EU waste management policy and refocus on the essential issue, which is the optimum utilisation of resources - and keeping with the concept of Sustainable Development - and offers a new approach entitled “Integrated Resource and Waste Management”.

“Integrated Resource and Waste Management” (IRWM) can be defined as:

The management of resources and waste in an optimised way, taking into consideration environmental, social and economic aspects.

Current waste legislation in the EU member states either prescribes one waste management route for a particular waste or - where more than one option is available - offers no incentive to waste generators to consider the environmental impact of each option. As a result, waste generators at present are driven to choose the perceived cheapest legal option. Under IRWM, on the other hand, waste generators would have more flexibility of choice and receive incentives for investigating various options and choosing the one with the highest resource utilisation and the lowest overall environmental impact, while giving due consideration to technical, social and economic dimensions

At the core of IRWM is an integrated approach to the optimal use of material and energy resources, which gives due consideration to all economic, ecological and social aspects, as far as they influence the optimum choice of waste/resource management option. “Integration” in this context means taking into account all relevant aspects of each waste/resource management issue, whether they are impacts on different environmental media, links in the chain of production and use or roles played by various partners in the commercial waste/resource cycle. A “global” view needs to be taken, not just in a geographic sense, but also with regard to the various elements of the waste/resource management process. This links IRWM to the integrated view of environmental (air, water, soil), social and economic considerations which is at the core of sustainable development.

A great number of materials that are currently classified as “waste” have potential for reuse, recycling or recovery by other means, and can therefore become a “resource”. Whether or not this potential can be realised depends on a number of factors, including the composition of the material, the physical location with respect to potential users, the economic aspects vis-à-vis alternative materials, and not least the constraints put on the entire process chain by the relevant legislation.

Under IRWM, any “holder of the waste” would use the following criteria to select the most sustainable IRWM option for its specific location and situation (geographical, legal, social, cultural and demographic characteristics as well as existing infrastructure):

1. The optimum utilisation of all relevant material and energy resources (“**Resource Efficiency**”).
2. The overall environmental impact of the different options, including consideration of the impact on all environmental media (“**Eco-Efficiency**”).
3. Where appropriate, the social impact of the different options (“**Social Impact**”).
4. The technical, economic and logistical aspects of each option (“**Technical Viability**”).

The integration of these four criteria in a final local choice, its implementation and continuous improvement represent the application of IRWM in accordance with the subsidiarity principle.

3. IRWM and the legal context

The legal framework within which the optimum waste/resource management option is selected must consist of “enabling” legislation, which actively encourages optimum resource utilisation, rather than “proscriptive” legislation, which creates unjustifiable barriers to the free movement of goods and services. It should be designed to actively encourage holistic solutions that ensure the optimum utilisation of resources, whether one, two or more partners are involved in the preferred waste/resource management option.

The principles of “shared responsibility” and “polluter pays”, which already feature in the EC waste strategy, are supported by UNICE and are fully compatible with IRWM. They must, however, be interpreted fairly and not lead to an unpredictable liability situation for industry in areas which are beyond industry’s control. Public authorities and consumers, as well as industry, have to carry their fair share of responsibility.

The different aspects of the life cycle of a product are a permanent concern for business which develops appropriate instruments for the different aspects of product development, one of which is product design. In IRWM the role of product design is to identify “sustainable” options for an easy and environmentally sound management of products at the end of their useful life. The EU legislation fails to take into account this continuous improvement of product. For example, the speed of technical and commercial innovation is so high in certain areas, that specific legislated end-of-life solutions may no longer be relevant when the product actually reaches the end of its life.

Continuous improvement, an essential element of all modern management systems, is not taken into account by current waste legislation. IRWM can provide mechanisms for managing and achieving continuous improvement with the aim of maximising resource utilisation and minimising environmental impact on an ongoing basis.

4. Conclusions

The integrated approach outlined in the IRWM concept encourages co-operation between waste/resource generators and their industry partners and allows synergies to be exploited, which benefit the environment as well as each of the partners.

The successful implementation of the Integrated Resource and Waste Management concept will require considerable effort by all parties involved, including industry and regulatory authorities. UNICE intends to carry out an in-depth review of existing waste legislation in dialogue with the European Commission and the Member States with the aim of enabling IRWM to succeed.

