

Spain: More than 70% of electronic waste management is uncontrolled

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A photo of electronic waste. More than 70% of electronic waste management is uncontrolled. Credit: Curtis Palmer

Almost three quarters of disposed electrical household appliances in Spain are processed out of the Integrated Waste Management System (SIG). A study at the University of Salamanca exposes how many manufacturers are not registered in the established waste management system and avoid payment.

According to the European directive on waste electrical and electronic equipment, manufacturers of such products should recycle the waste they generate during their activity until reaching an annual level of 4 kg per [inhabitant](#). However, in Spain the majority of unused equipment is managed under unauthorised systems. This is the case according to the

revelations of the study by researchers at the University of Salamanca, which was published in the 'Journal of cleaner production'.

"It is estimated that only 1000 out of 10 000 manufacturers are registered in Spain. This implies a payment evasion of at least 15 million euros," as explained to SINC by Dolores Queiruga, current researcher in the Business and Economics Department of the University of La Rioja.

In 2010, Spaniards generated 652 million kilograms of this waste or, in other words, 13.86 kg per person. Out of this amount, just 2.55 kg were collected and processed correctly under the "integrated management systems" (SIG). SIG consists of a collective model that manufacturers can use to manage their waste as well as [waste management](#) on an individual level.

In Spain there are currently seven SIGs, which are a collection of foundations that bring together companies from the electronics sector: ECOLEC, ECOTIC, ECOLUM, AMBILAMP, ECO-RAEEs, ECOASIMELEC and ECOFIMATICA.

The study analyses the evolution and stages of development for the treatment of this type of waste, starting from the first drafts of the European directive regulating electronic waste management to the current situation.

As for large [electrical appliances](#) for example, it is estimated that more than 70% of [fridges](#) and freezers are collected and treated in an uncontrolled way, with manufactures taking advantage of the fact that they are not breaking the law. The same goes for television and screens.

As Queiruga states, "the problem is that many manufacturers are not included in the official register of the Ministry of Industry that manages [electronic waste](#) (WIE-WEEE), thus making control difficult."

The study reveals that Spain's waste management system has some weak points. It suggests that registered manufacturers fulfilling the legal framework are economically worse off compared to those that do not assume the recycling costs themselves. The authors have also reported a delay on the part of the Autonomous Governments in developing public policy.

The need for leadership

When the European Union drew up the first draft of the directive, Spain was able to bring together interested agents in order to close collective deals on WEEE recycling. However, there were differences between the autonomous communities when it came to going ahead with pilot projects. The forerunners were Catalonia and the Basque Country.

The study outlines the importance of "a pioneering agent to set a model to be followed by others," like the company 'Indumental Recycling'. "Its background, experience and support in pilot projects represented a great impulse in the development of waste management systems," adds the study.

"With the first drafts of the European Directive, manufacturers realised they had to take responsibility for the waste generated by their products and all those involved began to think about the best way to go about waste management," as explained to SINC by Queiruga.

According to Queiruga, "recycling quotas also reduce the amount of appliances that are thrown away. Regarding the possibilities for reducing the number of appliances disposed of each year, the expert feels it is important to extend the useful life of the product through repair and citizen awareness. The expert also points out the importance of reuse so that they take longer to turn into waste.

Despite all this, the research study suggests that the waste [management system](#) in Spain could serve as an example for other countries that are just starting. It concludes that Spain could become a referent for other countries like the United Kingdom, the Unites States and China, where the majority of WEEEs are returned to the manufacturer or managed under volunteer programmes or other informal channels.

More information: Queiruga, D.; González Benito, J.; Lannelongue, G. "Evolution of the electronic waste management system in Spain". *Journal of cleaner production* 24: 56-65, 26 Nov 2011. [DOI: 10.1016/j.jclepro.2011.11.043](#)

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