

Abstract

The Circular Economy for Electronics — Gold Mine or Race to the Bottom?

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While the challenges to electronics recycling economics posed by product trends (e.g. declining material weight, declining precious metal content, and more) is generally well known within the recycling industry, the “e-waste gold rush” is still alive and well to the outside world. Underappreciation or misunderstanding of these key product trends is one reason this divide exists, though there are likely several others. What is certain is that this has led to a precarious situation in which outside investment has continued to pour in despite declining capacity utilizations and bankruptcies. Hence, the key issue has become how to prevent a “race to the bottom” while continuing to move toward a circular economy for electronics. The solutions must address the challenge from a systems perspective and should focus first and foremost on collecting and keeping material within the formal recycling chain to ensure that the high-quality recycling processes that already exist can be utilized to their full capacity.