



“As a mechanism, new currencies should be involved to support decision making, creating a new table of values and incentives around sustainability such as transparency, reputation, carbon neutrality, fair work, etc.”
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Image Source: Waste buyers in the city of Kanchanaburi in Thailand purchase waste that is not suitable for recycling. This is an example of complementarity between formal and semi-formal sectors of the economy and the development of secondary markets that support the circular economy. Polystyrene waste. Photo Credit: Photo from Jinnaritt, 2018, <https://fr.depositphotos.com/stock-photos/kanchanaburi-waste.html?qview=291490110>. Rights by Nicolas J.A. Buchoud.



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New currencies to support sustainable decision making for the transition to circular economy

Circular economy proposes a production model that adds value and extends the lifecycle of resources. In this model, both production and consumption determine how the system functions. Similar to the classic competition economic model, supply and demand establish prices and quantities (produced and demanded). In the frame of the Sustainable Development Goals (SDGs), mutual responsibility lies within both the productive processes and consumption realm. We will focus on the consumption side and the exchange relationships involved.

The exchange of products and services requires a medium that allows them to participate in the market, and to express preferences and needs of the consumers. That medium is money. A currency synthesizes human relations of exchange, for example through giving and receiving, or investing in an idea. Currencies have emerged to play a role as a vehicle in our exchanges. In addition, they act as units of quantification and help to standardize values, known as market prices.

A currency should be neutral, should not disfigure prices, and exchanges should not be vulnerable to misinformation and tendencies. Intangible currencies have to express the implicitly agreed upon value of each production step and each consumption decision.

In order to transition to a circular economy, tangible currencies must be included. As a consumer, one does not know exactly the real value of the product (i.e. human capital, technology, and resources invested) as well as social and environmental impacts generated from its production. All these factors should be reflected in the market price of the product under consideration. However, current pricing mechanisms do not reflect the factors already mentioned. How can we adapt our economic systems before our resources run out?

Classical economic theories inform us about relative prices and currency as a vehicle. We assume that one dollar is one dollar, in the country where it is issued and in the place

where it is accepted. We assume that the price of a merchandise sums up the effort, care, resources, impact and commitment of those who labored to put it in the market.

Nowadays, global markets for primary materials and technology exist. In this context, exchanges are faster and more difficult to trace. Our current system leads to distorted market prices, where consumer choices are not based on real and clear product information. Prices and currencies are biased by lack or absence of information.¹ Trusting the price tag and assuming that money functions as a neutral unit of account is insufficient. Today, relative prices of products and services are inaccurate and volatile. However, the pricing mechanism is not assigning the true value of goods. Therefore, circular economy should go beyond aspects such as recycling, reusing, or sharing. It must transform the economic logic of exchange.

We also observe that prices encourage non-responsible production and consumption. The consumer is accused of preferring single-use plastic to protect themselves from COVID-19, of choosing cheap and disposable clothing to stay warm in the winter, of expending vast amounts of energy in the summer with air conditioning systems, among others. On the other hand, the producer is challenged by the pressure to minimize costs to earn more. Market research exercises have shown that the informed consumer would be willing to pay more if better information is incorporated into the decision-making process.² In that light, many companies have

decided to invest in research and development departments. Consequently, these additional costs are passed onto their consumers.

The consumers, however, have stayed out of this matter. Do they still innocently believe in the price mechanism and nothing else? Another latent problem that must be reminded about the quality of the information. People trust prices because a currency seems tangible, and less susceptible to be perceived subjectively as compared to reputation, honor, traditions, or other values, which are not easily quantifiable.¹

Monetary exchange cannot resolve the complex problems relating to the use of limited resources. Hence, it cannot be established as the single decision-making factor. The polluter pays principle³ was novel at one time, but today it is inadequate.⁴ The regulator imposes a penalty, but does it really help to prevent or repair? Another aggravating circumstance is that penalties are ex-post measures. Perhaps the damage has already been done, and it is irreversible.

Aspects such as fair work, fair trade, carbon neutrality, clean energy, water and air quality, among others, could also be the subject of a vicious monetized pricing mechanism. If we recognize that the same logic used by pricing mechanisms could encourage sustainable practices, it could be more effective than the penalization of vicious conduct - create incentives not only to stop the disaster, but also to encourage responsible behavior.

Costs relating to researching and investing into clean technologies and the risk of assuming a clean process discourages the industry from innovating in this direction. For the consumer, the problem starts from making decisions based on market prices. As a mechanism, new currencies should be involved to support decision making, creating a new table of values and incentives around sustainability such as transparency, reputation, carbon neutrality, fair work, etc. In this way, an ex-ante incentive is created. Both consumers and producers require, in principle, transparency and quality in the information they provide and receive respectively, which could then be expressed in market prices and in new currencies.

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