

The importance of recycling

Jöns-Petter Svensson, KAABS Nordic AB

Responsible recycling

We have been consuming natural resources for quite some time now. If there's anything left when we're finished, we typically throw it away. But it is essential that we change our behavior. We need to rethink, react and recycle.

From the linear economy to the circular economy

The way the economy has operated until now is according to a linear model. We start by mining resources and using them to build something. After that something is consumed or no longer useful, we throw it away. Then we build new things to replace what we have thrown away. The new things tend to cost more because the resources we need are becoming scarcer, so they're more expensive. It's linear. There is a beginning and then an end.

But what if we change our way of thinking? What if we stop consuming things until there's nothing left, and start putting them back into the loop? That would be a move from a linear economy to a circular economy. In a circular economy we stop consuming resources until they're gone. Instead we recycle them and use them over and over again. What would it take, to change our mindset? We have to understand that recycling is profitable, both from an economic and from an environmental perspective. We need to rethink, react and recycle.

Why is recycling so important?

7 times Sweden's total emissions are saved each year by the recycling industry. Recycling reduces CO2 emissions and helps protect the environment. According to the EU, recycled metals cut CO2 emissions by nearly 200 million tons each year. In fact recycling annually reduces global CO2 emissions by 500 million tons. That's more than is emitted by the aviation industry worldwide. Recycling provides new raw materials and contributes to saving energy. Today the recycling industry provides half of the world's raw materials. Recycled aluminum uses 95% less energy than goods produced from virgin metal. Recycling iron and steel leads to a 74% energy savings and also reduces water and air pollution by 76% and 86%, respectively, compared to primary production.

How can we do it?

There has to be a political willingness to facilitate recycling in every way. One way would be tax breaks for companies using recycled materials instead of virgin material. This will ensure that our natural resources last longer.

There are several other important considerations. From a corporate perspective social responsibility is becoming an increasingly important competitive advantage. There is also a communications piece. When a company does valuable environmental work, this fact should be well-established and widely known in the market. We also require a well-functioning global market with easy-to-understand regulations to facilitate global trade. Global

demand for recycled materials will influence their collection and use. And a tax cut will of course increase demand.

What does it take to recycle?

Successful recycling depends on a few basic issues.

- **Matchmaking.** What do we need to recycle? In what ways can this scrap be put to further use? Who can use it? Who wants it? In many ways this is about matchmaking. I have something that's of no use to me anymore, but someone else needs it. From an environmental perspective it's always beneficial to recycle. From an economic perspective, it's beneficial in most cases. The better we are at matchmaking, the better the financial outcome will be.
- **Analysis.** We have to know what we're putting back into production. Scrap turns into raw material. It is vital that we know what it is and what quality a buyer can expect.
- **Handle the bureaucracy.** There are lots of rules and regulations regarding recycling. This is especially true when components and parts from the nuclear industry are involved.
- **Transportation.** The cost of transportation is crucial both economically and environmentally. Our aim is to always be as CO₂ neutral as possible.
- **Knowledge and experience.** We have to know who can use what recycled goods as a substitute for virgin material.
- It's about how the global market for recycled products works.

What do we have to do in the future?

Increasing recycling is the only way forward if we want to minimize our impact on the environment. We have to reduce the greenhouse effect. We know how to do it. Now we just have to decide to get the job done. Recycling is not as complicated as many people think. Environmental issues and their potential solutions are often presented as very complex. But in a way, recycling is actually quite easy and straightforward.

We have to rethink, react and recycle. To start recycling as much as possible is the only sustainable way forward, from an environmental as well as a financial perspective.