

Sustainable value analysis: from ‘selling gas generators’ to ‘selling gases’

A traditional air separation unit (also called gas generators) manufacturing company located in China, has in recent years been shifting its main business from making and selling gas generators to ‘selling gases’. Selling gases creates a continuous income stream whereas selling a gas generator usually entails a one-time payment. The business which employs around 3000 people has successfully established 27 gas sub-companies in China since 2010.

The challenge

The transformation extends the manufacturer’s business from only making and selling machines to also producing and selling gases by using their own machines. When undertaking such a transformation, value uncaptured can be left in the product life cycle. Some of the value uncaptured is visible, e.g. waste streams in production, co-products, under-utilised resources; and some is invisible, e.g. over capacity of labour, or service. We helped the manufacturer to identify the hidden uncaptured value in the life cycle and finds ways to create sustainable value from it.

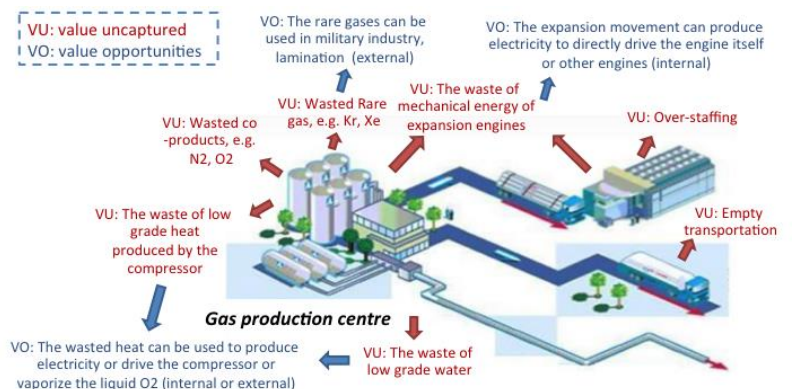
Approach and process

We used the Sustainable Value Analysis Tool (SVAT) with managers and designers from the manufacturer in order to identify the opportunities of creating sustainable value. The first step was to specify the life cycle of air separation units under the business model of ‘selling gases’ and then to describe the current value captured in each stage of life cycle. Then, the potential value that has not been captured previously (i.e. value uncaptured) is identified in each stage of life cycle. Finally, the identified value uncaptured is analysed and opportunities for sustainable value creation are explored.

This process was facilitated with step-by-step guidance and inspiring examples provide by the SVAT. The life cycle thinking, and the consideration of economic, social and environmental sustainability were naturally embedded into the process.

Outcomes

The manufacturer developed a better understanding of both positive and negative aspects of the current business model, and gained a systematic picture of the business relationship with stakeholders along the entire life cycle. Using SVAT, the manufacturer successfully identified some value uncaptured and the opportunities for creating sustainable value from it as shown in the diagram below.



Wider lessons

Value uncaptured (e.g. waste) exists in almost all companies, especially in servitizing companies. The identification of value uncaptured is difficult because they are usually invisible and hidden. The SVAT provides a systematic way to look for different forms of value uncaptured in each stage of life cycle: value missed, value destroyed, value surplus, value absence. Several patterns of creating value from value uncaptured can be summarised to guide future use of SVAT. For example, matching value absence and value surplus, reducing value destroyed and missed, internal value creation and external value creation.