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Accelerating the transformation of organisations towards sustainability through carbon credits

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Background

Economic growth resulted in approximately 36 billion Tonnes of carbon emissions each year (That's a lot of CO2...). The problem is that one of the most important issues to keep the planet and us in a safe space is to reduce these global CO2 emissions.

The responsible use of carbon credits can contribute to this decarbonisation race. A carbon credit corresponds to one Metric Tonne of reduced, avoided or removed CO2 and is used by companies to compensate for their equivalent CO2 emissions. However, for many specialists, carbon credits are perceived as a problem because companies misuse them.

Objective

This study recognises the potential positive environmental impact of the responsible use of carbon credits and is inspired by the **Business** Case for Sustainability and the Core Business Case Drivers. As a result, the aim of this research is to explore new ways in which carbon credits and offsets can be integrated into the business model innovation process of organisations in order to balance and increase their overall social, environmental, and economic performance.

Research Question

How can we use carbon credits and offsets to accelerate the transformation of organisations towards sustainability?

If opportunities are creatively identified and designed, it is expected **Conclusion** that the incorporation of carbon credits can also increase business profits and support the design of more equitable societies. This can enable markets to allocate carbon more efficiently and also to allocate it to the most efficient uses. Also, serve as a motivation for more organisations to use carbon credits in a responsible and strategic way, adding more allies to the race against the doomsday clock.

Methods

A framework has been elaborated based on existing literature, which intends to use carbon credits as a protagonist and catalyst in the process of **sustainable innovation in business models**. It is expected that by defining an "Initial State" and passing it through the "Acceleration" phase, their four elements combined will help to generate new "Desire States". Carbon credits are at the centre of this acceleration with economic, environmental, and social impact. The methodology selected was **Design Science (Phase 1)**. A **tool** based on the framework was **designed** and **tested**.

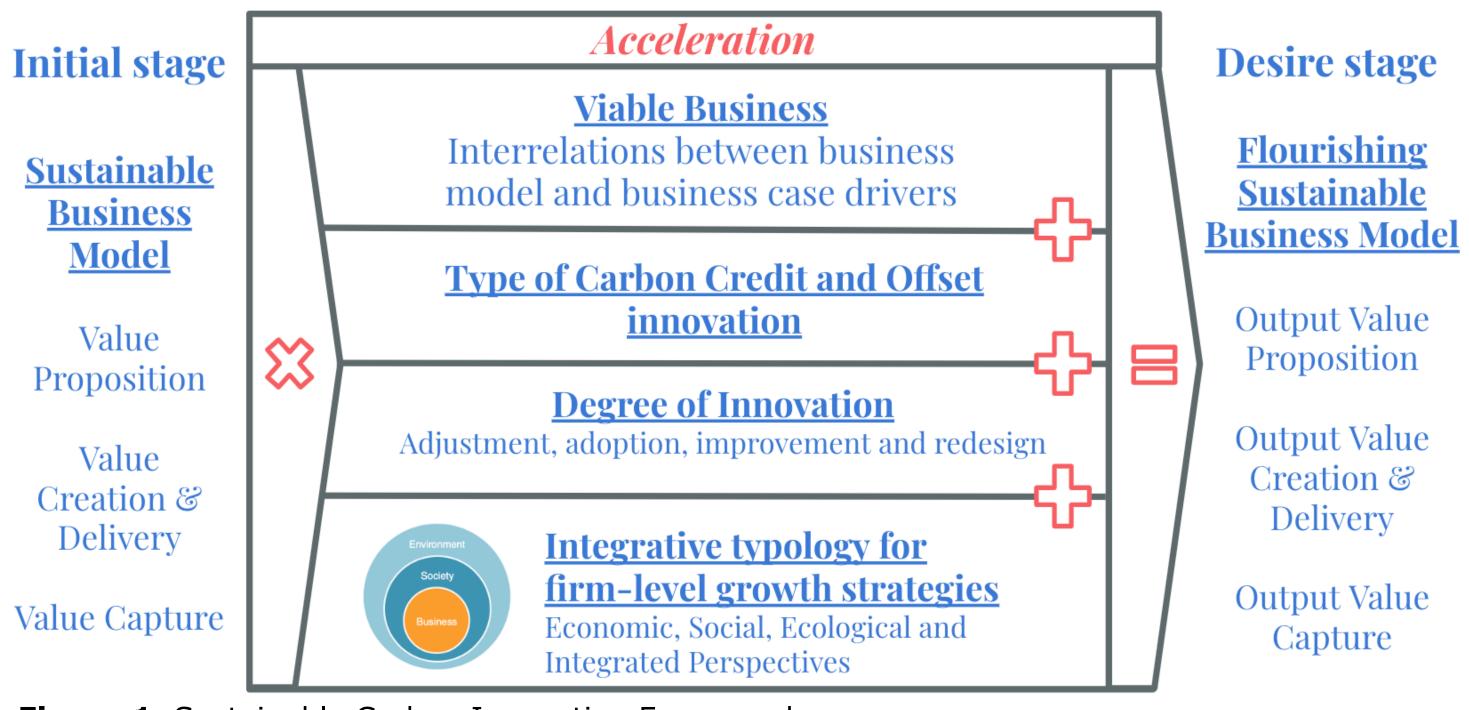


Figure 1. Sustainable Carbon Innovation Framework

Results

From the results, the **Co-benefit** concept emerged. This is any other social, environmental or economic value created through a carbon credit project, separate from offsetting via reduced, avoided or removed CO2. It can also be understood as a side effect, consequence or extra effect of a carbon project.

Five **Second Order Themes** were elaborated. They are detailed in Figure 2. Each theme includes to a greater or lesser extent the use of the various elements of the framework. It is valuable to differentiate between them because they allow distinct levels of approach and exploitation of potential opportunities to be considered.



Figure 2. How to use carbon credits and offsets to accelerate the transformation of organisations towards sustainability

Carbon credit projects can create two types of value: Intrinsic Value and Co-benefit Value. The five Second Order Themes showed us different ways in which the value created by Co-benefits can be captured not only by companies, through the six core business case drivers or new value propositions, but also by communities and (Industrial and/ or Community) clusters.

It is necessary to identify and assess the Intrinsic and Co-benefit Values created in carbon credit projects before and as they are implemented. The next step is to evaluate, innovate and think of creative ways so the company itself, other companies, clusters, communities, and the environment can capture some of that created value. The gateway for companies is the six core business case drivers. For communities and other companies, the path is creativity and collaboration. Finally, a well-executed carbon credit project will always have a positive value that can be "captured" by the environment. By fulfilling these conditions, with the proper tools and a lot of creativity to innovate, carbon credits can find a new justification to exist.

Recommendations

Flourishing

Sustainable

Output Value

Proposition

Output Value

Creation &

Delivery

Output Value

Capture

Companies can start looking proactively for Co-benefits in other innovations and activities, not just carbon credits, that have a positive social and/or environmental impact and were **previously** perceived as expenses, with no returns for the company. Doing this, companies and other organisations can remain profitable, or even generate more revenues, while contributing in a new way to **People** and the **Planet**.

Even better, organisations can look for other activities and projects, that generate Co-benefits and promote creative and innovative ways for in-need communities, other businesses, and the environment to capture part of that value. This supports organisations where continual and exponential growth is not a central or desirable aim and leads to regenerative forms of social and ecological thriving and success.