

# Chapter 1

## Towards the Transition to a Post–Carbon Society: The Crisis of Existing Business Models?

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### ABSTRACT

*Traditional strategic approaches based on competitive market environment analysis are increasingly challenged. In particular, the political momentum around global environmental issue (such as climate change) aspires to transform the traditional fossil-fuel based-economy into a low-carbon and sustainable world. Taking this into consideration, the authors of this chapter explore how existing businesses are envisioning the prospect of a low-carbon future into the elaboration of their strategies. This chapter provides a diagnosis of internal and external factors that will trigger incentives to reshape business models incorporating green considerations, on a basis of three sectors analysis (oil, car and outdoor sportswear industries). The authors are aiming at enlightening the way they conceive the transition and the challenges that remain for business transformations.*

### INTRODUCTION

The economic boom experienced after the second world war paved the way for the development of

an economic model based on mass production and consumption. Environmental awareness and its reintegration in businesses has been a progressive process arising in the 70s. The first oil crisis was a driver for an increase in the efficiency in the use of inputs, whereas the main reason pursued

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was not environmental but economic purposes. Serious industrial accidents raised public concern on industrial safety. To this respect, corporate responsibility took its roots in safety issues and made progressively its way to environment and broader sustainable development concerns in the 90s. To address this, norms, regulations and voluntary initiatives started to develop, and progressively, the questions of the corporate impacts on environmental and society became unavoidable. Businesses face now a huge challenge: how to remain competitive in a fast evolving and highly uncertain context in which environmental issues become more and more strategic? In particular, climate change may provide the main exogenous driver to radical changes in the way to conceive the generation of financial value (the business model) in the near and medium future. Indeed, exhaustion of fossil energy resources and energy security issues back the political momentum to strengthen policies and measures to shape a new economic paradigm and shift to low carbon production and consumption patterns.

The challenges raised by the prospects of a low carbon economy– at a 2050 horizon– imply that green business model will need to be widely spread and generalized. What are the requirements for businesses to anticipate and evolve so as to remain competitive in a low-carbon economy? Provided that each economic sector is highly specific (in terms of assets, technology, regulation, market consumer, value creation etc.), a sector by sector approach is necessary to isolate the impact of external and internal factors that will trigger the incentives to reshape business models. This will allow to build a diagnosis on how business are considering the transition to a low-carbon economy and to what extent they are facing this issue. It aims to build on specific experiences to illustrate the conditions for the creation of new economic models and how to make them emerge.

## **BACKGROUND**

### **Environment and the Need for Renovated Strategies**

In a basic sense, a business model describes the rationale of how a company generates financial value from an economic activity and sustains it. To this respect, the strategy of the firm since the eighties consists in analyzing the traditional Porter's five forces. Michael Porter provides a framework to better identify the context in which industry operates. It identifies five main determinants of the competitive intensity of a sector and how they influence corporate strategy. It includes the degree of rivalry, barriers to entry, risks of substitution (in products and services), power of suppliers and buyers' power (Porter, 1980). In this approach, the main company objective is to shape comparative advantages out of the analysis of these five forces, to build its model upon them and sustain it. Porter identifies three strategies to take an advantage on the market: low costs, differentiation or focalization. In this approach, the competitive environment plays a key role in framing corporate strategy and the performance level it can reach.

This framework was especially workable in the 80s in a quite stable environment. Richard d'Aveni (1995) shows that little after, companies were submitted to a profound modification of their competitive market environment, defining it as a new era of "hyper competition". This translates into a far more complex and unstable environment with the emergence of new sectors in technology, internet or computing sciences; the liberalization of markets and the globalization of firms. Changes are accelerating, upsetting traditional business models. The leaderships are continuously called into question and no comparative advantage is definitely acquired. In this new configuration, the company is compelled to adopt proactive strate-

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