



# Re-conceptualising Sustainable Business Models

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#### Introduction

- Companies have been considered as responsible for many negative impacts on the environment and on societies (Dunphy et al., 2003)
- In response, corporations have engaged in efforts to **integrate sustainability** into their operations and better contribute to making societies more sustainably (Elkington, 2002), and satisfy the needs of today's societies without compromising the needs of tomorrow's societies (WCED, 1987)







#### **Corporate Sustainability**

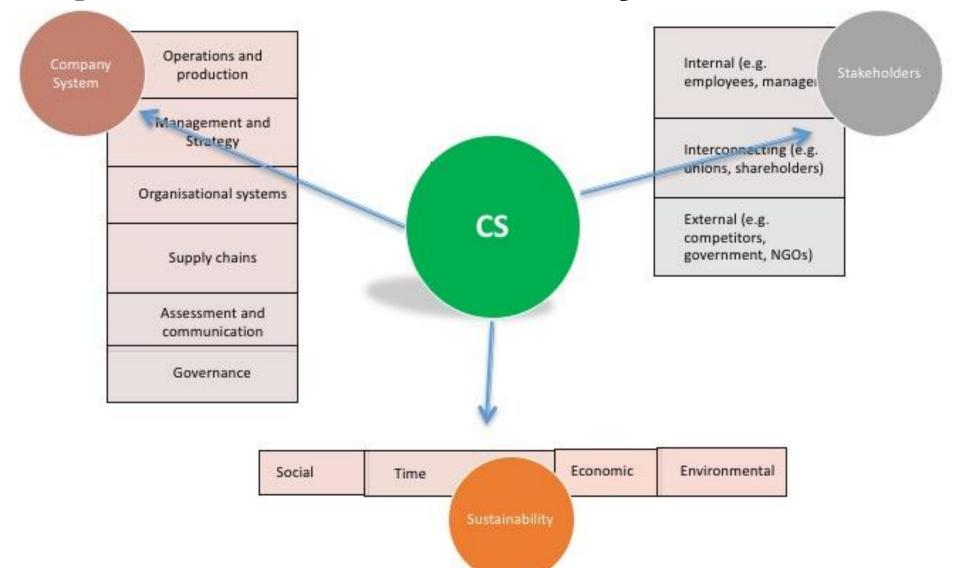
 "Corporate activities that proactively seek to contribute to sustainability equilibria, including the economic, environmental, and social dimensions of today, as well as their inter-relations within and throughout the time dimension (i.e. the short-, long-, and longer-term), while addressing the company's system (Operations and production, Management and strategy, Governance, Organisational systems, Procurement and marketing, and Assessment and communication), as well as with its stakeholders"







#### Corporate Sustainability framework









#### CS and business models

- CS has challenged traditional business models (Lozano, 2012; Murray, Skene, & Haynes, 2015), which has fostered a shift from selling products to providing service solutions to customer needs (Lay, Schroeter, & Biege, 2009; Mont, Dalhammar, & Jacobsson, 2006) and better engaging with stakeholders, while creating competitive advantages to customers, the company, and society (Boons & Lüdeke-Freund, 2013; Porter & Kramer, 2011; Stubbs & Cocklin, 2008)
- A number of alternative, or sustainable, business models have been proposed to better contribute to sustainability (see Benn, Dunphy, & Griffit, 2014; Mont et al., 2006; Stubbs & Cocklin, 2008; Bohnsack, Pinkse, & Kolk, 2014; Schaltegger, Hansen, & Lüdeke-Freund, 2016a)







#### **Business Models (BMs)**

- A comprehensive understanding of how a company does business (Beattie & Smith, 2013; Teece, 2010) and how value is created (Afuah, 2004)
- They articulate the logic, the data, and other evidence that support a value proposition for the customer, and a viable structure of revenues and costs for the enterprise delivering that value (Teece, 2010)
- A BM has value proposition as the offer and the target customer segment, the value creation and delivery system, and the value capture system (Richardson, 2008; Boons and Lüdeke-Freund, 2013; Osterwalder et al., 2010)
- A BM clarifies the chosen position of the company within the value chain, i.e. what are the key assets to own and control in order to capture value (Teece, 2010)







#### Sustainable Business Models (SBMs)

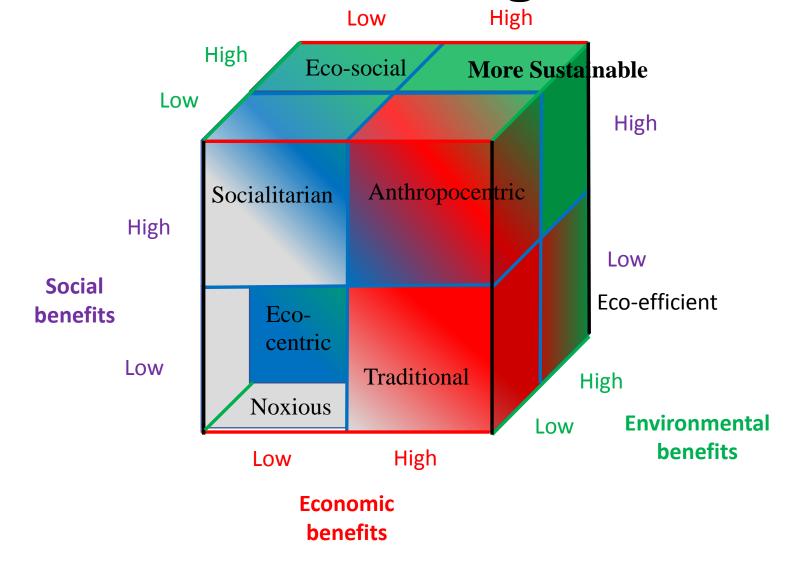
- A number of alternative, or sustainable, business models have been proposed to reduce the environmental burdens, with a particular focus toward switching from product sales to a service approach (Dunphy et al., 2014; Mont et al., 2006; Stubbs & Cocklin, 2008)
- Lay et al. (2009) proposed three alternative business models: (1) leasing; (2) renting; (3) 'product pooling'
- Three examples of sustainability oriented business models are: selling the function that baby prams provide (Mont et al., 2006); chemical leasing (Lozano, Carpenter, & Satric, 2013); and ridesharing business models for sustainability (Cohen & Kietzmann, 2014)







#### **Business Models categorisation**









#### Stubbs and Cocklin (2008)

 A SBM uses a Triple Bottom Line Approach in measuring performance; a SBM considers the needs of all stakeholders rather than giving priority to shareholders' expectations; a SBM treats nature as a stakeholder and promotes environmental stewardship; Sustainability leaders, or champions, drive the cultural and structural changes necessary to implement sustainability; and an SBM encompasses the systems perspective, as well as the firmlevel perspective







#### Boons and Lüdeke-Freund (2013)

- Four elements of a SBM:
  - Value proposition providing measureable ecological and/or social value in concert with economic value;
  - Supply chain involving suppliers who take responsibility for their own as well as the focal company's stakeholders;
  - Customer interface motivating customers to take responsibility for their consumption as well as for the focal company's stakeholders
  - Financial model reflecting an appropriate distribution of economic costs and benefits among actors involved in the business model and accounting for the company's ecological and social impacts.







#### **Bocken**, et al. (2014)

- Eight SBM archetypes, grouping them into:
  - Technological (maximise material and energy efficiency, create value from 'waste', and substitute products and processes with renewable and natural ones)
  - Social (deliver functionality, instead of having ownership; adopt a stewardship role; and encourage sufficiency)
  - Organisational (re-purpose the business for society and the environment, and develop scale-up solutions)







#### Abdelkafi & Tauscher's (2015)

- Four partial models:
  - The firm
  - The environment
  - The decision maker
  - The customer
- The BMfS is built on the firm's value creation capacity, value to the customers, value to the natural environment, and the value that the firm captures
- The environment is conceptualized by means of three main stocks:
  - Renewable resources
  - Non-renewable resources
  - Pollution and waste







#### Roome & Louche (2016)

- New business models for sustainability are developed through interactions between individuals and groups inside and outside companies, which are based on three elements:
  - Building networks and collaborative practices for learning and action around a new vision
  - Deploying new concepts drawn from outside the company
  - Elaborating and implementing structure within a reconfigured network







#### Schaltegger, Hansen, & Lüdeke-Freund (2016)

"A business model for sustainability helps describing, analysing, managing, and communicating (i) a company's sustainable value proposition to its customers, and all other stakeholders, (ii) how it creates and delivers this value, (iii) and how it captures economic value while maintaining or regenerating natural, social, and economic capital beyond its organizational boundaries"



	Authosr	Stubbs and Cocklin (2008)	Boons and Lüdeke- Freund (2013)	Bocken, et al. (2014)	Abdelkafi & Tauscher's (2015)	Roome & Louche (2016)	Schaltegger et al. (2016)
Company system	Operations and production			Yes			
	Management and strategy	Yes	Yes	Yes	Yes		Yes
	Organisational systems					Yes	
	Supply chains		Yes	Yes			
	Assessment and communication	Yes	Yes				Yes
	Governance						
Stakeholders	Internal	Yes			Some	Yes	Yes
	Interconnecting	Yes					Yes
	External	Yes	Yes	Yes	Some	Yes	Yes
Sustainability	Types	More sustainable	More sustainable	Eco-efficient	Eco-efficient	Socialitarian	More sustainable
Approach	External resource	Yes	Yes	Yes	Yes	Yes	Yes
	Internal system	Yes				Yes	Yes
	Technical			Yes			
	Inputs		Yes		Yes		





## Critiques to current approaches to SBMs (1)

- Although some discussions on SBMs claim to be based on the TBL (Bocken et al., 2014; Stubbs & Cocklin, 2008), the majority of them are heavily focused on the environmental dimension, such as ecological modernisation or through resource efficiency (see Bocken et al., 2014; DeSimone & Popoff, 2000; Holliday et al., 2002; Robèrt, 2000; Stubbs & Cocklin, 2008)
- Bocken et al. (2014) highlighted some social issues of sustainability, but these are mainly of the impacts of products for consumers

The time dimension is conspicuously missing in SBMs discourse.







## Critiques to current approaches to SBMs (2)

- Most definitions are based on a narrow, business oriented perspective of value proposition, creation, and delivery (see Abdelkafi & Tauscher, 2015; Bocken et al., 2014; Boons & Lüdeke-Freund, 2013; Schaltegger et al., 2016), Which arises from the traditional BMs perspective, i.e. from a (mainly economic) value point of view
- Most authors use the term 'sustainable business model', with the exception of Schaltegger et al. (2016), who prefer the term 'business models for sustainability'
- A better term would be 'more sustainable business models', where sustainability is embedded in the business model, and is based on sustainability as a dynamic ideal, and thus no business model will ever be fully sustainable.







#### Gap in SBM discourses

- Most definition tend to neglect the Governance, Operations and production, and Organisational system elements of the company system
- Jones's (2013) four main elements of an organisation can help fill these gaps:
  - Organisation structure: the formal systems of task and authority relationships that control how people coordinate their actions and use resources to achieve organisational goals
  - Organisational culture: the set of shared values and norms that controls
    organisational members' interactions with each other and with suppliers, customers,
    and other people outside the organisation
  - Organisational design: the process by which managers select and manage aspects
    of structure and culture so that an organisation can control the activities necessary to
    achieve its goals
  - Organisational change: the process by which organisations move from their present state to some desired future state to increase their effectiveness.







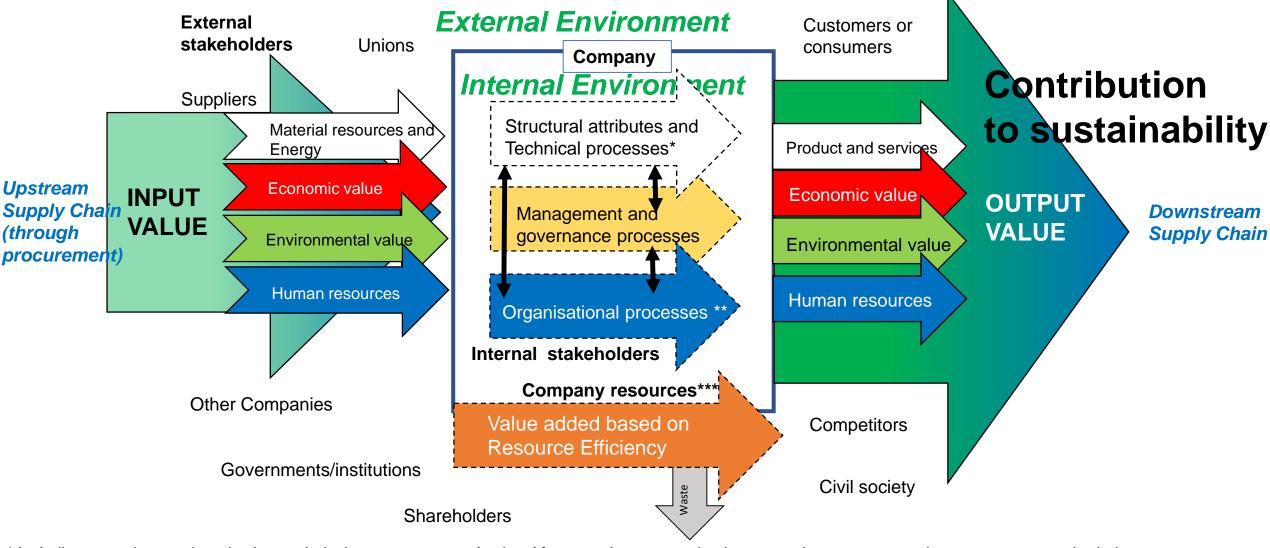
### Proposed definition of A More Sustainable Business Model

 "A more sustainable business model is a holistic and systemic reflection of how a company operationalises its strategy and adds value, based on resource efficiency (through technical, management and governance, and organisational processes), to the inputs of the company, so that the outputs have more value and contribute more to sustainability that the inputs (in regards to material and resources that are transformed into products and services, economic value, human resources, and environmental value). The business model is affected by the company's resourcés (tangible and intangible), and by the company's stakeholders, including the environment (inside and outside the company)".



TIME

#### Change



<sup>\*</sup> Including operations and production, technical processes, organisational forms and structures, business practices, strategy and management, supply chain management, governance, and assessment and communication



<sup>\*\*</sup> Relating to the organisational system (e.g. individual, groups, norms, values, behaviours, and their respective attitudes)

<sup>\*\*</sup> Tangible and intangible





#### Conclusions

 This paper is aimed at providing a different perspective to SBMs by analysing current definitions and incorporating principles of organisational theory

 The paper departs from the value proposition, creation, and delivery approach to one where value is added, based on resource efficiency, to inputs that results in products and services that better contribute to more sustainable societies







Companies have to embed sustainability holistically, systemically, and integrally into the elements of their business models on cultural, structural, firm-level, and systems-level attributes to create value for the company whilst considering its stakeholders, and not based, as in many SBMs discourses, on creating value under the pretence of sustainability.







### Thank you!

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