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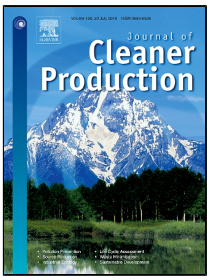

Creating an industry-level business model for sustainability: The case of the European ports industry

Mychal Langenus, Michaël Dooms

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Mychal LANGENUS (corresponding author)
Pleinlaan 2 – Room C.2.10, B-1050 Brussels – Belgium
Tel: +32 2 629 20 35, Fax: +32 2 629 20 60
Mobile: +32 498 13 99 10
Mychal.Langenus@vub.ac.be – www.vub.ac.be/BUSI

Prof. dr. Michaël DOOMS
Program Director MSc Bedrijfskunde and MSc Management
Vrije Universiteit Brussel
Pleinlaan 2 – Room C.2.13, B-1050 Brussels - Belgium
Tel +32 2 629 21 29, Fax +32 2 629 20 60
Mobile +32 477 606 132
Michael.Dooms@vub.ac.be – www.vub.ac.be/BUSI

Abstract

The seaports industry is an industry that produces voluminous negative externalities on the local and regional level, and is also affected by the challenges of climate change. To improve the dimensions of the sustainability – economic, social or ecological dimensions for cleaner production - on an industry level, there is a need to build an inter-organizational network. In this paper, we apply a virtual learning model for the setup of an interorganizational network (ION) for sustainable development in the ports industry, which offers a unique context of high stakeholder complexity and conflict. The value of this paper is that it builds on previous research on the role of the net broker function for triple bottom line transitions through an action research project for the creation of an ION for sustainable development. We furthermore provide managerial recommendations for the setup of such networks.

Keywords: networks, net broker, learning organization, sustainability, ports industry, stakeholder management

1. Introduction

Seaports are large networked infrastructures with considerable and environmental impacts such as noise disturbance, air pollution and visual impediments (Acciaro, 2015). Climate change consequences, for example sea level rise, high winds, and storm surges can have considerable impacts on ports' facilities as well, which could endanger a region's import and/or export (Hanson and Nicholls, 2012; Asariotis and Benamara, 2012; Becker et al. 2013; Ng et al. 2016). Similar to other large industrial operations generating substantial