

The Green Transition – Designing new metrics for sustainable development

Jean-Roger Drèze
Assistant director
Federal Department for Environment
Eurobuilding - FPS Public health and Environment
Square Victor Horta 40, PB 10
B- 1060 Brussels (Belgium)
Phone : +32 (0)2 524 96.37
Fax: +32 (0)2 524 96 04
e-mail: jean-roger.dreze@health.fgov.be
www.Belgium.be

500 words extract describing the proposed paper

Summary – Asking for radical change in governance and business models

This conceptual paper focuses on new visions and thinking related to the rise of globalisation in the eve of the knowledge economy and asks for innovative metrics in the field of governance. New collaborative models should impact market structures, create new business models and promote eco-entrepreneurship. At a macro level collaborative models could introduce disruptive metrics based on sustainability principles to achieve the green transition. The paper presents big pictures and elaborates on the links between globalisation, innovation and sustainable development.

Premise – Change in the scale of the economy will change the scale of risks

Evidence shows that the scale of an economy (tribal, feudal, national, global) is associated to its endogenous determinants of capital accumulation and productive patterns (nature, farmland, capital, knowledge). Moving to the knowledge society will change the scale of the economy. The globalisation process can be viewed as a Transition to the knowledge society.

The Transition provides global assets and benefits (Internet) but also global threats (climate change, disruptive ecological footprint, loss of biodiversity). Facing such global threats rises the question of *governing* the globalisation. Cumulative rebound effects will deny progress due to technological and non-technological innovation and will prevent balancing our global ecological footprint (GEF) to the global ecological capacities (GEC). The paper explores how innovative metrics based on sustainable development principles could mitigate rebound effects and achieve absolute decoupling in an age of globalisation.

Our approach – Facing global threats means to adopt new strategic responses

Global threats ask for absolute decoupling. One example is the “zero emission” Antarctic Polar station. However absolute decoupling is not always possible. De-materialisation and de-carbonisation of processes and products are insufficient to overcome rebound effects associated with progress in rational use of resources. Alternative solutions to absolute decoupling are to enhance global ecological capacities and responses through new collaborative models.

The paper presents a Gauss Curve model to explore potential cost-benefit redistribution process between economy and environment. Switching to new cost-benefit ratio – at corporate or public level – could be possible when using sustainable development paradigm as a re-distributive and self-regulative endogenous growth model.

Our contribution - Rethinking sustainable development as a self-restrictive model

Introducing disruptive metrics based on sustainable development principles could help to internalise external costs. The paper suggests that corporate governance based on the optimisation of a neo-classical production function $y = f \{C, L, E\}$ could help to close the gap between the GEF and GEC. Such optimisation needs to introduce new self-regulative approaches based on renewed sustainable development metrics.

Sustainable development principles, through for example eco-design and eco-conception, can change behavioural, cultural and political priorities. The role of collaborative models: revisited paradigms can provide for alternative governance models, regulating mechanisms and accounting procedures. Designing sustainable development metrics is necessary to offer a new 'general equilibrium model' ensuring re-distributive effects among the economic, social and environmental pillars. The wealth of nations remains in new forms of capital and design.

The paper gives examples of new market requirements addressing financial and stock exchange markets. Enterprises coping with SD will achieve better equity quotation because they regulate and fine-tune their global competitive environment, building on their competitive intelligence.