

Strategic sustainable development

- selection, design and synergies of applied tools –

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Abstract

The number of tools and approaches to develop sustainability is growing rapidly. Sometimes they are presented as if they are contradictory or in competition. However, a systems approach consistent with basic principles and the requirements of sustainability shows that these tools are complementary and can be used in parallel for strategic sustainable development. In fact, it is only when using these approaches outside of the systemic context of sustainability that they become contradictory.

This paper is a collective effort of scientists who have pioneered some of these tools and approaches. . The paper maps essential elements for developing sustainability and documents how these elements relate to the application of the respective tools. The objective is to show how these tools and approaches relate to each other and build on each other when used for planning for sustainability

Key words: Sustainable development, sustainability, systems thinking, backcasting, upstream thinking, strategic planning, Factor X, Factor 10, Ecological Footprinting, ISO 14001, EMAS, EMS, System Conditions, Life Cycle Assessment (LCA), The Natural Step (TNS), Zero Emissions (ZE), Cleaner Production (CP), Sustainable Technological Development (STD), Natural Capitalism.