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## **Rethinking growth in the light of Contraction and Convergence** **- The concept of Contraction and Convergence**

The CONVERGE\* research project is predicated on the concept of ‘Contraction and Convergence’ (C&C) that informed the Kyoto process. It explores how this simple and elegant concept might be extended to other areas of human activity - particularly consumption of materials and services.

C&C links the key social concept of equal rights to emissions with the key ecological need to reduce emissions. It issues a challenge to existing economic systems to develop equitable processes for emission reductions. Thus CONVERGE aims to rethink globalization by developing our understanding of convergence beyond greenhouse gas emissions to the wider social, economic and ecological dimensions of sustainability. Implicit in this project is the search for an alternative structuring of the growth model of contemporary capitalism.

Firstly, we introduce the CONVERGE project and its theoretical background in more detail. We start with the definition of Sustainable Development proposed in the Brundtland Commission Report “Our Common Future” and unpack it into its constituent elements. These are, essentially, recognising and meeting human needs (using an intra and intergenerational perspective) and employing a mode of development which recognises and works within environmental resource limits. We then provide an overview of the strong equity-based Carbon resource management framework that inspired the CONVERGE project which addresses both of these fundamental issues – the original concept of ‘Contraction and Convergence’, as proposed by the Global Commons Institute.

Following this, we provide a review of literature relevant to the two concepts of a) planetary limits and, b) equity approaches in resource management regimes. We refer firstly to the ways in which ecosystem limits have been proposed and recognised (such as thermodynamics, planetary boundaries, and the ecological footprint, as well as other resource specific limits) in order to provide the theory behind the concept of the need for ‘contraction’. We then describe how intra and intergenerational equity is dealt with in resource management regimes, through using the concepts of environmental space, budgeting, the idea of the Commons, environmental justice and environmental debt and ‘just sustainability’ in order to illustrate how the concept of ‘convergence’ can be understood.

We then introduce in brief one or two examples of the initiatives which the CONVERGE project is studying in detail to illustrate how both contraction and convergence may be pursued simultaneously, and in some cases independently. We highlight the different levels and processes of contraction and convergence observed in the examples.

The paper closes by calling for more research on the potential for the coupling of contraction and convergence at the level of theory and practice in order to understand its potential benefit to the concept of sustainability.

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\* CONVERGE is funded by the European Commission’s 7th Framework Programme.

The authors are researchers but also have direct experience as practitioners as GreenDependent Institute is a research and action non-profit organization established with the aim of connecting research and practice, and facilitating dialogue and feedback between them.

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