

Abstract I

The project aims to bridge the gap between research institutions and secondary schools in order to disseminate best practices related to enquiry-driven science education. The project Consortium includes participants already actively involved in innovative science education programs, as well as renowned research institutions, all concentrated in Central Europe and the Balkans, thus targeting a unique region within Europe with a unique set of challenges and opportunities. Owing to its uniqueness, we have chosen to complement a traditional approach with an innovative approach in disseminating best practices. The traditional approach involves collection of existing best practices among partners with experience, their comparison, refinement and development of a set of guidelines for science education and finally dissemination through events, workshops, documents and dialogue with policy makers at national, regional and EU level. The innovative approach consists in the development of a pilot program. The program, which will select 30 mentors and 60 students and provide the students with a 2-year mentoring program on enquiry-driven research and training in entrepreneurship, science communication and ethics. The program will a) verify “on the ground” a set of best practices aiding in their improvement b) create a group of mentors and students who would act as “dissemination ambassadors” for the project. These students will be involved in dissemination events at national level to their peers and to policy makers, and at EU level during summer schools and a final symposium in Brussels. The overall impact of this methodology will be reinforced by: a) the development of an online virtual community acting as a living knowledge repository for best practices in innovative science education, b) exploitation of project results and self-assessment to which specific work packages are dedicated.

Abstract II

The paradigm of economic growth has dominated politics and policies since 1945. Environmental concerns were introduced later but always subordinated to growth objectives. Expectations of win-win, sustainable growth through technological and efficiency improvements, have not been fulfilled. The present economic crisis opens up a social opportunity to ask fundamental questions. Managed well, this may be the best, possibly last and only chance to change our economy and lifestyles in a path that will not take us over climate or biodiversity cliffs. Is it possible to improve well-being, enhance social justice and sustain the environment without economic growth? The project pursues a multi-tiered research plan to address this fundamental question. It brings together a uniquely interdisciplinary consortium of 12 partners, leaders in fields such as ecological economics, sustainable development and consumption, industrial ecology, urban, energy and mobility studies. We work with a new concept, **sustainable de-growth**, and develop a range of tools to structure it, including a new set of macro-economic and coupled economy-transport-land-use models, material flow analyses and a new set of indicators. We adopt a comparative approach, comparing past and future de-growth trajectories in different European and non-European regions and create scenarios of sustainable de-growth for Europe and three other selected regions by 2050. We evaluate innovative small and medium-scale policy and community experiments in energy, transportation, urban planning, housing, credit and employment sectors from a range of European countries. The knowledge base that underpins the formulation and implementation of EU policies, especially in relation to energy, transport, environment and the territory at a regional scale will be advanced and the Lisbon and European Sustainable Development Strategies reframed.

