

Sustainable development. A Comparative Analysis of the Performance of French departments

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Since the Brundtland report (1987) and the adoption of Agenda 21 at the 1992 United Nations Conference on Environment and Development in Rio de Janeiro, governments committed to developing strategies to achieve sustainable development. To address the challenges of the threat of ecosystems degradation and global warming, a radical technological transformation of the global energy system is required. Therefore, governments need to encourage concerted and coordinated efforts to integrate global ecological concerns into local and national policies (United Nations, 2008, UNEP, 2014). A whole set of initiatives are emerging locally to respond to these new challenges.

In France, the Grenelle Acts I and II have given local authorities a major role in setting up the energy transition by extending their field expertise in the field of energy policy, by enabling them to develop actions in favour of energy management and to intervene in the field of the production of renewable energy sources. To carry out its missions, the region has the Regional Plan of Climate, Air and Energy (SRCAE), created by the law 2010-788 of July 12, 2010, called "Grenelle Act II". The SRCAE must define, from an inventory, objectives and orientations for the horizons of 2020 and 2050 (De Charentenay et al., 2012). Regional strategies are defined and implemented at the local level by the local authorities which are strongly mobilized. In addition to the environmental issue, the creation of new sustainable and territorialized energy sectors is likely to generate local jobs that cannot be relocated.

The paper proposes an evaluation framework for comparing sustainable development in France at the departmental level, taking into account six dimensions: environment and natural resources, energy transition, territories and sustainable mobility, economic

dynamism, social cohesion and solidarity, and governance. Considering a wide range of variables, we build aggregate composite indices for each dimension of sustainable development (OECD, 2008, O'Connor et al., 2008, Mazziotta et Pareto, 2013, 2017). Then a cluster analysis is used to classify French departments and to explore similarities and dissimilarities with respect to the six components of the sustainable development. Results make it possible to identify the strengths and weaknesses of the departments as well as the levers and obstacles to sustainable development. Spatial patterns may also eventually emerge. Finally, recommendations can be drawn for public policies.

Keywords:

Sustainable development, Aggregate composite, Data analysis methods

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