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I) INTRODUCTION The topic of the transition from a concentrated and unidirectional economic model, based on fossil fuels to a decarbonized one is increasingly current, despite the resistant of some concentrations of interest that are strenuously opposed to an unavoidable change of paradigm. We are living an era that in the next few years foresees a sharp increase in population, an expansion of developing economies together with the improvement of citizens' living standards. As a result, global energy demand is expected to double simultaneously with these expansions by 2050¹ and a further increase in greenhouse gas emissions could occur if energy demand is not brought under control. However, this is not the only reason behind why today's activity against environmental change represents a priority for governments around the world. A timely transition can also provide an opportunity for competitive advantage, development and new additional business for precursors. The so-called low-carbon economy is part of the bigger phenomenon named 'green economy', a new economy that is making its way in the world. It represents a more democratic, egalitarian and respectful economy, destined to transform and replace the old economy based on the maximum exploitation of natural resources and on the scarce attention to the impacts of human activities on the environment and society. The low-carbon economy represents an almost anthropological change that can change our society from its foundations and that requires a totally different perspective also with respect to the concepts of work and profit. A perspective that involves everyone, from businesses to citizens called to interpret a new role and to take on new responsibilities. De facto, the issue around the low-carbon economy is not just about environmental

sustainability, but also social and economic sustainability. It is therefore not just a matter of this or that sector, but it is an overall productive culture that concerns and can invest the entire economic system of a country. In fact, the path of transition could encounter many obstacles. First of all, the inertia of the old systems of production and consumption along with the equally strong resistance of the political class, which is much more tied to a traditional vision of the economy. Secondly, the chronic delay in conceiving research and training as strategic also matters. Yet, beyond all these aspects, perhaps the most detrimental is the lack of a clear and solid shared vision.

That is the decisive component that allows for the implementation of integrated economic, social and environmental policies, which would eliminate partial and sectoral solutions only capable of promoting particular interests. Therefore, the road to be taken for the adoption of a low-carbon economic system is long and requires a profound transformation of the economic regime. It is therefore based on the different attitude to resilience and innovation that different models of capitalism have the chance to shift to a low-carbon economy. In this analysis, it will be employed the Soskice and Hall's Liberal Market Economies (LMEs) / Coordinated Market Economies (CMEs) approach (2001) which aims to define the socio-institutional characteristics of different economic systems, in order to establish the aspects on which a model has a comparative advantage in a low-carbon transition over the other. This study considers the chance for the two pure models of capitalism, coordinated and liberal market economies as defined by the Varieties of Capitalism framework (VoC), of transiting to a low-carbon economy.

The essay provides a picture of three key driving factors that allow the transition; in sequence innovation, financing and the political-institutional context and applies them to the CMEs/LMEs' peculiarities. Based on the mentioned, three components of the transitions, the analysis will argue that LMEs, having a comparative advantage in radical innovation and in getting private funding for it, are more suitable than CMEs for a rapid emergence of a low-carbon economy. While, the chance for CMEs to move towards a low-carbon economy is low because, being organized on the heavy presence of industries and trade unions, the latter may obstacle the dismantling of the whole economic structure or at least would slow it down.

The essay is so structured. Section 2 shortly exposes studies on LMEs and CMEs' prospects to move to a greener economy. Section 3 introduces the low-carbon economy and lists its implications. Sections 4, 5, 6 apply the three main drivers of the transition to LMEs and CMEs' settings to examine the probability for them that a low-carbon economy will emerge. Section 7 takes the UK and Germany as examples, for LMEs and CMEs respectively, to observe an empirical evidence of current outcomes. Finally, section 8 outlines main conclusions.

II) CMEs VS LMEs: theories of the transition

According to the new institutionalism theory, different studies suggest that the development and support of new sustainable technologies and the institutional architecture of the countries are directly related. Therefore, CMEs, facing a more stable political structure and a clear integration between actors involved, are more predisposed to encourage new sustainable technologies development.

Precisely, Mikler and Harrison (2012) in their study push on the coordination between State and firms to argue that CMEs are better in pursuing social goals. Additionally, in 2013 Lachapelle and Paterson stated that actually CMEs have been able to reduce emissions by a larger amount, compared to LMEs. Lastly, according to S. Cetkovic and A.

Buzogány (2016), features of political coordination and State's decentralization, combined with a targeted support for research, make CMEs able to acquire a pivotal role in the transition to renewable energies.

Nevertheless, while the cited authors focus their attention on the level of coordination within a State and in particular in Germany as a CME, however, according to Lema et. Al (2014) was the existence of a number of favourable factors, the most important of which is the full and stable support of the government, to ensure that Germany put efforts in favour of renewable energies. Thus, these studies primarily focus on political and institutional changes, leaving a marginal place to innovation and its relationship with governance. Instead, in this analysis, innovation is seen as a vital element of a low-carbon transition, becoming the starting point to investigate how LMEs and CMEs support innovation and consequently how likely is the transition for them. 1 OECD Environmental Outlook to 2050, Climate Change Chapter, November 2011