



PhD in INGEGNERIA GESTIONALE / MANAGEMENT ENGINEERING - 39th cycle

PNRR 118 PA Research Field: MEASURING CIRCULAR ECONOMY: ASSESSING CIRCULAR STRATEGIES AND SUPPORTING POLICIES

Monthly net income of PhDscholarship (max 36 months)

€ 1450.0

In case of a change of the welfare rates during the three-year period, the amount could be modified.

Context of the research activity

Motivation and objectives of the research in this field

Circular Economy is raising among the most debated topics in academic research as well as among practitioners and policy makers. Being rooted into the industrial ecology, Circular Economy is making its own place in the strategic management literature, with several scholars investigating the implications of adopting Circular Economy in organizations. Despite this, the issue of properly measuring the adoption of Circular Economy and its impacts at micro (company), meso (industry and supply chain) and macro (regional, national, super-national) level still deserves further attention from scholars. Indeed, most of the contributions so far focuses only on the "material" and "energy" flows related to Circular Economy strategies, leaving quite under investigated the other different implications (environmental, social and economic) whose proper measure will be of paramount importance to support managers in their choice of adoption of Circular Economy strategies. The goal of the present research activity is to develop an holistic theoretical framework, in the form of a Circular Economy scorecard, to tackle the issue of assessing on a truly multidimensional perspective the impacts of adoption of Circular Economy. The framework, validated through an empirical investigation, is expected to contribute to the academic debated on Circular Economy. Moreover, it will provide guidance to managers willing to assess in a proper way the circular strategies adopted by their companies. Last but not least, the framework will support policy makers (at regional and



	national level) in assessing their policies supporting the adoption of Circular Economy by properly identifying, in a multidimensional perspective, the impacts at micro, meso and macro level, leaving room for deciding what performance (material and energy flows, environmental, social and economic) to maximize.
Methods and techniques that will be developed and used to carry out the research	<p>The research project will benefit from an extensive literature review, grasping the current status of the academic debate about measuring Circular Economy. This will lead to the development of the framework (scorecard) for assessing the impacts of the adoption of Circular Economy strategies at micro, meso and macro level. The framework will be then validated through an empirical investigation, organized as follows. In a first round of empirical test, the research project will benefit from the case study methodology (Eisenhardt, 1989; Eisenhardt & Graebner, 2007) to be applied in order to investigate in depth cases where to measure the impacts of Circular Economy strategies involving already established manufacturing companies belonging to different industries in Italy. In a similar fashion, a parallel empirical investigation will take into account main policies for supporting Circular Economy at regional and national level, investigating the perspective of policy makers. Based on the results of the first round of empirical test, a survey will be carried out to refine the framework and to fine tune the individual measures adopted, also providing a picture of the adoption of such measures among already established manufacturing companies and policy makers at regional and national level in Italy.</p>
Educational objectives	<p>The candidate pursuing this research project will have the opportunity to deepen the investigation of Circular Economy, and particularly of measures for Circular Economy, thus focusing on one among the most debated topics in Academia. Moreover, the candidate will learn qualitative (case study) and quantitative (survey) research methodologies, applying them in a deep empirical investigation. Last but not least, the candidate will have the chance to interact with several managers and policy makers, having access to their experience in the field of</p>



	Circular Economy.
Job opportunities	The candidate pursuing this research project will have many opportunities ahead. First of all, the candidate will have the chance to develop an academic career, by having investigated a topic which is currently one of the most debated in strategic management literature. Outside Academia the candidate will be able to exploit the knowledge developed in the research projects in consulting firms as well as in companies willing to adopt Circular Economy. The candidate will also have the opportunity to join Public Administration, at regional and/or national level, to support the development of policies about Circular Economy and to monitor their progresses and impacts.
Composition of the research group	3 Full Professors 1 Associated Professors 1 Assistant Professors 1 PhD Students
Name of the research directors	Davide Chiaroni

Contacts
davide.chiaroni@polimi.it

Additional support - Financial aid per PhD student per year (gross amount)	
Housing - Foreign Students	--
Housing - Out-of-town residents (more than 80Km out of Milano)	--

Scholarship Increase for a period abroad	
Amount monthly	725.0 €
By number of months	6

National Operational Program for Research and Innovation	
Company where the candidate will attend the stage (name and brief description)	
By number of months at the company	0
Institution or company where the candidate will spend the period abroad (name and brief description)	
By number of months abroad	6



Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information

The candidate will be involved in undergraduate and post graduate education about Circular Economy, will join the Energy & Strategy research team and will be provided with a portable computer and a desk space in the Energy & Strategy common room at DIG.