

Circular economy inside the policy structures: a multisectoral approach

Topic: Sustainable production and consumption I (Chair: Shigemi Kagawa, Kyushu University)

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In March 2020 the EU-Commission launched the new Circular Economy Action Plan (CEAP) as one of the main pillars of the European Green Deal, the European Union's new agenda for sustainable growth. The action plan sets a concrete and ambitious program for the EU Member States, which are called to introduce policy measures to minimise waste generation and to increase recycling and materials reuse. Since these measures are expected to bring both environmental and economic benefits, their evaluation cannot neglect anyone of these two aspects. As for the economic sphere in particular, it is important to distinguish among the implications for the different production activities and for the different Institutional Sectors. On this background, this paper provides a multisectoral analysis of the structure of emissions and waste in Italian economy and identifies a set of policy measures, which are capable to reduce the level of pollution without impinging income growth, thus going beyond the apparent traditional trade-off between environment protection and economic growth. The first result of the paper is an original accounting framework, in which waste generation and air pollution are related to the phases of income generation, distribution and use pictured by the Social Accounting Matrix for Italy. The second is an extended multisectoral model that shapes the connection between the economy and the environment by modelling the processes of production and use of waste and emissions. The third result comes from the application of the Macro Multipliers approach, and it consists in the identification of a set of endogenous demand structures for the policy instruments, which allow achieving the composite policy objective: waste reduction, mitigation of emissions and positive economic performances.

Keywords: Social Accounting Matrix, Environmental Accounts, Circular Economy, Macro Multiplier approach

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