

---

## Preface

---

### Giovanni Lagioia\*, Vera Amicarelli and Teodoro Gallucci

Department of Economics, Management and Business Law,  
University of Bari Aldo Moro,  
70124 – Bari, Italy

Email: giovanni.lagioia@uniba.it

Email: vera.amicarelli@uniba.it

Email: teodoro.gallucci@uniba.it

\*Corresponding author

**Biographical notes:** Giovanni Lagioia is a Full Professor in the Department of Economics, Management and Business Law, Commodity Science Section at the University of Bari Aldo Moro, Italy. He teaches commodity science and technology of the production chain. His main interests of research refer to the following topics: studies on circular economy focusing on the relationships between resources, commodity and environmental studies on the material flow analysis and environmental impact of production processes and consumption. He is a member of the Italian Commodity Science Academy (AISME) of the International Society of Industrial Ecology (ISIE) and International Academy of Commodity Science and Technology (IGWT).

Vera Amicarelli is an Associate Professor in the Department of Economics, Management and Business Law, Commodity Science Section at the University of Bari Aldo Moro, Italy. She teaches industrial ecology and quality theory and technique. Her main interests of her research refer to the following topics: studies on circular economy focusing on the relationships between resources, commodity and environmental, studies on material flow analysis and the environmental impact of production and consumption processes. She is a member of the Italian Commodity Science Academy (AISME) and International Academy of Commodity Science and Technology (IGWT).

Teodoro Gallucci is a researcher in the Department of Economics, Management and Business Law, Commodity Science Section at the University of Bari Aldo Moro, Italy. He teaches market environmental sustainability. His main interests of research are: studies on the material flow analysis and environmental impact of production processes and consumption, physical input-output analysis of the whole economy, industrial ecology, environmental management and circular economy. He is a member of the Italian Commodity Science Academy (AISME) and International Academy of Commodity Science and Technology (IGWT).

---

Emerging management practices related to sustainable development are becoming prominent issues within political and organisational agendas. Sustainable development has to be considered as a complex long term, multi-level and multi-actor process which is practicable if a profound intersection of economic, social and environmental fields is achieved. This approach makes sustainable development a continuous process of changes tending to a multi-dimensional, dynamic and plural concept rather than a well-defined

scheme. It is widely recognised that sustainability is the outcome of negotiation, competition, experiment, and scientific and academic debate. Nevertheless, from a literature perspective, it is clear that sustainability aspects are not adequately addressed in technology management theories and practices. For this reason, researches on sustainable development have to advance scientific understanding in order to address a variety of areas related to sustainability, including systems analysis, environmental management, clean processes, green chemistry and green engineering.

In this contest, this special issue of the *International Journal of Sustainable Economy* entitled 'Sustainable technology, innovation and management' enlarges the discussion related to the role that, all together, these areas of interest play in implementing systems and models of sustainable development. The same title was included in conference publications of the joint conference Management Knowledge and Learning and Technology Innovation and Industrial Management (MakeLearn and TIIM 2015) on 27th–29th May 2015 in Bari, Italy. The Slovenian International School for Social and Business Studies in Celje and the Italian University of Bari Aldo Moro organised the conference and the Polish Maria Curie-Skłodowska University in Lublin and Thai Kasetsart University in Bangkok supported it. The conference offered the opportunity to researchers and managers from different countries to discuss various problems arising from the exchange of knowledge between the academia and the economy particularly referring to sustainable development and continuous innovation.

Interesting and useful papers were selected through the usual refereeing process of the *International Journal of Sustainable Economy* and they are published in this special issue. All of them refer to special aspects of the abovementioned subject.

The first paper focuses on the way to manage companies according to the environmental requirements. A model is proposed to support managers in strategic planning activities concerning environmental change projects. At the same time, the key factors that have to be integrated in the organisation have been explored.

Studies exploring the lean philosophy in the two following next articles discuss its benefits in today's rapidly changing economy where pressure for improved environmental performance is increasing.

The fourth paper focuses on the importance of communicating sustainability. The aim is to determine if it is possible to realise sustainable marketing highlighting the different attention paid to sustainability by diverse firms and productive sectors.

The results of the last paper are significant as well. It illustrates how difficult it is for the manufacturing sector to integrate accounting systems with environmental indicators to disclose sustainability reporting. This is the key point as it states the importance of environmental data availability because without them there are no monitoring activities. Consequently, there is no possibility to implement new sustainable organisational managerial practices and to define business strategic planning.

This means that all the subjects involved such as institutions, companies and academic organisations have to work to make data available for measuring sustainable, economic and social values.