

“Circular economy”

by Paolo Manzelli President of Egocreanet



“The concept of waste in nature does not exist; everything is an input to another process in the natural life cycle”

In a mechanical reductionism of science based on a linearity of time, the industrial model of production follows a linear sequence of supply chains: starting from primary products, transformation and conversion in goods followed by consumption and waste → dispersed by incineration or landfill. Thus the Industrial linear model, now become exponentially wasteful of environment and inefficient in economy so that nowadays it becomes the deep root of the world wide economic crisis.

By contrast the development of a new model of "circular economy" the production system can renew itself in the context of the future knowledge society. Therefore, it will be built a new coordinated process of production, designed to create minimal waste, allowing the products and co-products and by-products are easily recycled or repaired, to bring them back to raw materials or will be designed in advance to be updated or completely reused.

In the circular economy, the thinking design of value creation will be built on longevity, flexibility of the production-systems and on new forms of consumption.

So that the linear model of the obsolescent industrial society nowadays, it should be replaced by a circular model that maximizes the effective use and reuse of natural resources. Any waste is not more designed to be out of the production process, this is because all the materials are seen as an added value gained by co-and by product in an interlinked cross-cycle performances of new business models of the future Eco-Economy.

In syntheses “Circular economy” breaks with the traditional patterns of linear production, of the old industrial society, which evidently goes from the linear production of a product to its waste destruction. Henceforth the new Circular Business Model replaces the obsolete linear model through a “closed loop” approach in the contest of an advanced knowledge society, going to obtain ZERO WASTE, e.g. a disruptive innovation model, where the creation of positive value is sought at each stage, avoiding any waste of resources and ensuring customer health and social equity.

The potential innovation of the circular economy may be useful to further improve EU Cooperation, youth employment, cost savings and environmental impacts. As a matter of facts the circular economy knowledge and know-how are a very high opportunity to build up together, economic integration with human capital, that can be exportable world-wide as knowledge innovation, based on scaling up existing business models of linear production as well as testing new circular ones. Re-designing industrial systems and encouraging reuse of waste materials it is a goal that needs to be maintained in a long term strategy of a circular economy going beyond the pursuit of a simple waste prevention and waste reduction. The criteria of development based on "NO WASTE" are

directed forward to inspire a fundamental change of cultural paradigm of production and consuming, including technological, organisational and social and economics innovation across and within new value production areas, addressed to accelerate the move towards a ecological circular economy world-wide.

EGOCREANET (NGO c/o Business Incubator of the University of Florence - IT) aims to support the initial transition to a circular economy in Tuscany and also would favour a particular role of Italy to play, and to develop policy options for a rapid change of Circular Economy across a range of areas in agrifood and nutraceutical co-production, for improving health future prevention into a sustainable international strategy. The agri-food chains, currently generate significant amounts of waste, despite the fact that the main challenge, global challenge is addressed to ensure adequate nutrition for a growing world population. So that it becomes a real problem the enormous growth of the quantity of waste in this agro-food sector, because it is associated with an increasingly high risk of environmental impact.

The choose of focus on CIRCULAR ECONOMY about the AGRIFOOD supply chains therefore it is taken into account by the Egocreanet initiatives, this because, the large opportunity to utilize agricultural waste in large volumes, allows to obtain significant benefits in economic and environment that are central to the management of many biological materials in order to utilize sub-products, as alternative energy and also for the possibility to extract nutraceuticals as co-production. Therefore EgoCreaNet seeks to maximize the potential values of the circularity favouring the start in pilot projects and initiatives for the promotion of an international framework of collaboration between industry and research, aiming to accelerate the transition to a circular diversified on a European scale.

Moreover, EGOCREANET maximize the potential of innovation through the promotion of calls Horizon 2016/20 on Circular Economy oriented in restructuring of the agri-food sector through the formation of a network of research in collaboration with industry, in order to speed up the transition towards a circular economy diversified able to link agriculture with nutraceuticals manufacturing. To achieve these results as a first initiative is to organize the International Conference on CIRCULAR ECONOMY in the food industry and research. This conference will be held in Florence on 29/30 April 2015. During this conference will be launched the new European framework of projects and also H -2016/20 will be presented some studies and reports useful for improving skills to optimize and enhance the co-production of foods and nutraceuticals.

More info about the conference in Florence may be requested to :
Paolo Manzelli; <EGOCREANET2012@gmail.com>
;<https://www.facebook.com/groups/195771803846822/>

Biblio On Line:

Zero waste : <http://www.zerowastescotland.org.uk/category/subject/circular-economy>

Scoping Study 2014: http://www.ieep.eu/assets/1410/Circular_economy_scoping_study_-_Final_report.pdf

State of the Art: <http://innodigest.com/towards-the-circular-economy/>

H-2015 Call: <http://www.2020-horizon.com/Ensuring-sustainable-use-of-agricultural-waste-co-products-and-by-products-i2028.html>