

The main idea of the circular economy approach appeared in the early 70s of the previous century. But actually it started to be intensively debated, investigated and developed only a few years ago. The circular approach, in contrast to widely developed leaner one, represents a development strategy that enables economic growth while aiming to optimize the chain of consumption of materials due to zero waste production. A circular economy approach could be observed at macro, mezo and micro levels. Recent research shows that a modern circular economy conception became transforming into a more systematic and holistic scientific theory. Now it covers not only material flow aspects, but also tries to find the answer about how the world could be more balanced, effective and satisfied, taking into account environmental and social aspects of production and consumption. Such changes show that recently individuals and organizations are developing their own thinking and practice in terms of a circular economy. The latest EU strategic documents demonstrated powerful arguments that this approach will increasingly dominate over the next decades in terms of using it for building the development strategies at all levels.

Despite the fact that a circular economy approach already appeared in several country policies and at the EU level strategic document, this phenomenon was not investigated enough and scientifically justified at the basic research level. The conception still does not have its own established principles, instruments, measuring indicators and mainly uses scientific tools of the other environmental economics and management approaches (such as an industrial ecology, a performance economy, a blue economy, a generative design etc.). So, in our research we are going to focus on developing main categories for circular economy conception as an independent scientific thought. With the next step we plan to investigate the linkage of circular economy conception with eco-innovations and sustainability level in regions. Since at regional level economic, social and environmental changes are more observable. A region is something in between the national and local levels, so at this level individual and common interests meet. Our further step is the design of indicators which could measure circular economy at the regional level and investigate which incentives and tools could be used for changing main stakeholders behavior and stimulate them to make more environmentally sustainable choices. And finally we are going to create a regional circular economy model which reflects the link between eco-innovations and sustainability in regions. The model will give us an understanding about future perspectives for regional development based on circular economy approach.

The whole project is expected to contribute significantly to our previous knowledge about a circular economy conception and its interrelation with eco-innovations and sustainability. We expect that it could be a valuable theoretical base for more exact measuring of a circular economy effects and creation of more balanced development strategies in regions.