Sustainable Chemistry for Life
The Role of Chemistry in the European Bioeconomy

Preliminary Joint Statement
July 2015

The European Chemical Regions Network (ECRN) and the European Renewable Resources and Materials Association (ERRMA) present the following statement to voice their common interests on sustainability and the future of the European bioeconomy.

1. BIOECONOMY CALLS FOR SYSTEMATIC AND HOLISTIC APPROACH

The bioeconomy can best be conceived from a systemic perspective. It offers an approach that can bind together complex systems and inter-connected challenges. The bioeconomy spans multiple sectors and processes from the production of renewable biological resources and the conversion of these resources and waste streams into value added products such as food, feed, bio-based products (materials, chemicals, fibres) and energy in a sustainable manner.

A holistic, coherent and harmonised framework in the fields of agriculture, forestry, industry, environment (e.g. climate change), research and regional development should be strengthened.

Bioeconomy already contributes to the circular economy. It is a part of the economic shift to use sustainable biomass and e.g. organic wastes via sustainable processes to biobased products respecting end of life systems. It entails a change from linear thinking to circular production and consumption models. It has to be taken in mind, that beyond recycling and waste management, circular economy should encompass broader systemic change and re-thinking of design, use of raw materials and consumption or reuse.

To efficiently integrate bioeconomy and circular economy, products and materials should not only be used efficiently and recycled, but includes also to be biodegradable and resourced from renewable resources. Therefore, the bioeconomy and circular economy can complement each other and contribute to sustainable low-carbon future economy.

2. DEVELOPING THE EUROPEAN BIOECONOMY REQUIRES NOVEL APPROACHES AND DECISIVE ACTION AT ALL LEVELS

Enabling policy framework necessitates synergies across European, national and regional strategies. Beyond strategic cooperation and overarching common vision, cooperation among all stakeholders along the value chain is crucially important.

Bioeconomy is both global and local. Local production, suitable logistic systems and interconnected value chains and production facilities are an imperative for efficient use of biomass. While the operations must be efficiently organised at the local level, the market potential of the bioeconomy and biobased products is global. This should be recognised by policies at all levels.

3. COOPERATION ACROSS SECTORS, REGIONS AND INSTITUTIONS IS VITAL FOR FURTHER DEVELOPMENT OF BIOECONOMY

The bioeconomy requires cooperation and combination of technologies from different industrial sectors. Due to its cross-sectoral nature, the bioeconomy benefits from innovations in the fields of chemistry, forestry, technology, construction and energy as well as sciences for nutrition and health, among others. Industrial symbiosis, cooperation across industry boundaries and across sectors and clusters is a defining characteristic of the bioeconomy.

Cooperation should seek to enable synergies across European, national and regional policies and strategies. An integrated and cross-sectoral, inter-disciplinary policy approach to the bioeconomy is needed.

4. REGIONS, CLUSTERS AND NETWORKS SHOULD ACT AS CATALYSTS OF BIOECONOMY

Regional networks and clusters provide good basis for implementation of the bioeconomy. Moreover, they can act as important sources of information, knowledge generation and experiences. Regional experiences and approaches can be shared beyond the clusters and developed into broader strategies.

One of Europe's greatest strengths lies in the diversity across its regions and trans-border and trans-sectoral cooperation. The existing good practices and solutions implemented across Europe are a great source of information and inspiration. As an interregional network, ECRN is committed to facilitating exchange of experiences and scouting good practices across European regions. Cross-border collaboration and cooperation across regions and clusters is at the core of ECRN activities.

Innovations are not born only within large companies, but increasingly among SMEs and interconnected value chains with economic and non-economic actors. Clusters are a prime breeding ground for such innovation. ERRMA, the European Renewable Resources and Materials association, therefore endorses these activities as efficient "bottom up" approach to make the bioeconomy and circular economy concrete and alive.

More information:
ECRN www.ecrn.net
ERRMA www.errma.com