

# **BREAKOUT SESSION: ACHIEVING NET-ZERO THROUGH THE CIRCULAR ECONOMY**

The current response to the global climate crisis represents an incomplete picture. In fact, while the transition to renewable energy, complemented by energy efficiency, can address 55% of global GHG emissions, it is imperative to tackle the remaining 45% associated with product manufacturing to achieve the UN climate-related goals. Putting in place a circular economy, transitioning away from the current linear model of production, is an essential transformation needed to achieve our emission reduction targets.

**Faustine Delasalle, from Mission Possible Partnership, in her keynote speech focused on:**

- The need to achieve net-zero by 2050, if we want to have any chance to keep the temperature rise below 2° degrees and the transformational change that is required.
- The transition is technically feasible. Most of the technological solutions already exist, even if not all of them are already commercially available and cost competitive.

- The circular economy is a crucial route – together with the energy efficiency and the decarbonization technology – to achieve net-zero by 2050.
- A more circular economy can cut emissions from the harder-to-abate sectors in industry by 40% by 2050 and unlock new opportunities and revenues stream for companies.
- Value chain partnerships are crucial to achieve a low carbon economy. We need a mindset shift from pure competition to collaboration.

In a discussion moderated by Jo da Silva from ARUP, our speakers Anna Åkesson, from Skanska Group, Mercedes Alonso from Neste, and Steve Hodgson from Rusal, highlighted the opportunities, and the challenges in the transition to circular strategies to achieve net-zero.

## **THE KEY TAKEAWAYS**

### **OPPORTUNITIES/SOLUTIONS:**

- In the construction industry, the re-use of concrete and asphalt are very practical examples of how circular strategies are today already adopted to reduce the use of virgin materials.
- In the chemical industry, decoupling from fossil fuels by using recycled or renewably sourced polymers is crucial to abate emissions. For example, in packaging the use of renewably sourced polymers has shown - through LCA analysis - that can reduce the GHG emissions up to 85%.

- In the aluminium industry, while there are strong efforts to transform the production process to achieve net-zero, great results on recycling have been already achieved and today aluminium is one of the materials most recycled globally.
- Recyclability and the maximization of recycled content must become key parameters to design and develop circular products.
- The public procurement from government and institutions, the rising collaboration along the value chain and the support from the financial community are key levers to scale circular solutions.

### **CHALLENGES:**

- The regulatory environment is evolving, but slowly. There is a need of policies and legislations that incentivize and promote the adoption of circular strategies.
- The critical mass that is required to scale up solutions still needs to be achieved.
- The availability and affordability of renewable and recycled material at scale is still limited, even if virgin materials are getting more scarce and therefore expensive.

**More information:** [John Reves](#)