

# ***The benefits of a circular economy for achieving climate objectives and recovering better***

*A UN pre-event of the World Circular Economy Forum + COP26 Climate Meeting  
Co-hosted by the EU Delegation, the Permanent Missions of Netherlands, Kenya, Singapore and Finland*

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Your excellencies, Ladies and Gentleman,

Thank you very much to the co-hosts of the meeting for inviting me to this important preparatory event on circular economy and climate. I am happy to introduce the International Resource Panel's perspective on the topic, as well as to learn about the approach of the other speakers.

Let me frame my perspective in **three main points**. First: Why resources management, or circular economy, is indispensable for effective climate action. Second: Why a resources management approach is crucial to effective, modern global governance. And third, what governance change leaders, like those around the table today, can promote at the World Circular Economy Forum in April and in Glasgow at the COP26.

**First, why are resources – and their management in a circular economy – essential to mitigating climate change?**

The **concept note** you received with the invitation for this meeting already explained this aspect quite well and I am happy to see that you read our reports.

The **IRP Global Resources Outlook 2019** showed clearly, that over 50% of global GHG emissions are caused by natural resources extraction and processing. So, only the extraction and first refinement of raw materials already cause over 20 Giga-tons of CO<sub>2</sub> per year. These materials include metals, non-metallic minerals, biomass and the extraction and refinery of fossil fuels. If you look at what is more commonly referred to as 'materials', namely metals, minerals, construction wood and plastics, this alone amounts to 23% of global emissions.

These emissions are often referred to as **'heavy industry' emissions**, and in traditional charts, you would not find these emissions labelled as "material emissions". This is because most of these material-related emissions are caused by the steel and cement industry, in very energy-intensive refinery processes.

**A more traditional climate approach would ask:** How can we reduce the emissions of these industrial processes by making them more energy efficient or using renewable energy. This is certainly important, and it is good that more and more parties are working on the necessary technological innovations to making material production cleaner. And this is also high on the agenda for the COP26 presidency.

What is **often overlooked** though, or at least not put at the forefront of these conversations, is that the approach of 'cleaning up' production alone is missing an important part of potential policy potential and will likely never reach net-zero emissions by 2050. This is mainly because 1) some technologies are still in development and won't be deployable fast and wide enough, 2) some of the emissions do not come from energy but inherent chemical reactions, and 3) such an increase in renewable energy production will in itself require large amounts of materials, also rare materials. One could say, in an absurd way, we produce even more materials to decarbonize the production of other materials.

**Global material demand, in a GRO 2019 "business as usual scenario", is projected to double by 2060** - so there is no way to decarbonize all that production in time and without massive trade-offs. Therefore, the only chance for reaching our 2030 and 2050 climate goals is to deploy all measures possible to defy that BAU scenario. This means **reducing the need for new materials** as much as we can - while of course taking into account that those countries in need of developing their basic infrastructure will still need to increase their use.

**How could we reduce these impacts in an integrated manner?** The most effective way is to **start at the end where the product systems meet the societal need**. With a question, let's take an **example of houses and vehicles**, how many of them are actually needed and used, and could we redesign these systems in a far more efficient way. And here is where

**natural resources management, and circular economy**, as an important instrument, comes into play. There are great opportunities across sectors to design and create better and smarter. **Cities** can become more compact and buildings more space and material efficient at high living quality. **Transport** can become shared, connected and more integrated, to avoid cars standing around empty and clogging traffic, and to save massive amounts of materials. This would also free up a lot of space for nature. Of course, also the production of the system's elements – houses and vehicles - must become cleaner, using renewable energy and alternative materials. But once we have designed the systems better to service societal needs at minimal resource input, there is much less production to be 'cleaned up'.

And it is of course not only about houses and vehicles. **Heavy machinery** can be shared through smart platforms and remanufactured given the right design. On the **bio-material front, or biomass**, we can create healthy meals with more plant-based proteins, reduce food waste, enable nutrient cycling and design agricultural practices in regenerative ways. And there are many more examples of how to reduce material use in industry and everyday life.

Interestingly, **current climate policies mostly start from the other end of the picture**. They first ask how to clean up energy production, and how to use cleaner energy in industrial production - not asking how much of that production is useful for society in the first place. More and more they do indeed start looking at energy efficiency. But they barely look at how do systems, such as housing or mobility, be more resource efficient as a whole, avoiding energy intense production in the first place.

**There is a double benefit to such circular measures**. And these are rarely talked about, not even inside, let's call it, 'circular community'. What I mean is the inherent **synergy between systemic dematerialization measures and operational energy use**. What does this mean: If you design a city for systemic material efficiency, you will have more compact neighbourhood designs, space-efficient buildings, shorter commutes and fewer cars. All of these reduce material consumption, but it also reduces the need for heating or fuel use. A double win for climate and a double chance for humanity to win the climate change battle.

**So, to my second point: How can circular economy, or the resources management approach, as we call it in the IRP, inspire better governance?**

When we come to the “how”, the lens of natural resource management is helpful to create integrated tools. Why? Too many times our **policy focus is on impacts and consequences rather than on drivers and pressures causing them**. When it comes to impacts, the awareness that climate and biodiversity consequences are correlated, is finally emerging. Finally, because it is not so difficult to understand that both are caused by same logic of drivers and pressures. Both are connected to the human activity, to the unsustainable economy we have created - only in the case of climate they are more directly linked to certain economic sectors, like energy, and in the case of biodiversity loss to other sectors, like food systems and forestry. The climate/biodiversity nexus and approach could be easily extended also to the pollution and health implications, which are based on the same drivers and pressures ... but our political understanding is not yet there.

**So, at the very heart of the resource management approach is the idea of understanding drivers of impacts.** Through analysis of material flows, we can trace wanted or unwanted impacts back through their causal chains to their drivers in economic and human behaviour. In governance, the logic should be the same.

I know from my own experiences, that the difficult reality for the **policy makers responsible for the protection of environment** is, that they are responsible for solving the problems, while majority of the tools, instruments for effective solutions, are in the hands of other colleagues in the government, or in the Commission. The success of environmental policy thus to a large extent depends on the understanding and willingness of those colleagues to listen and associate their voices with environmental policy. In particular on the understanding and willingness of those colleagues that are responsible for the areas with the highest environmental impacts - impacts on climate change, biodiversity loss or health and pollution. Only by bringing those in charge of the impacts, together with those in charge of resource use, can we develop effective joint vision, joint targets and joint policy pathways.

Even in climate, where energy and climate voices were more than a decade ago brought at the same table, this is not so obvious, and we, for example, still need 'Climate Champions' at COP to mobilize industry. And on the political level, it would certainly help if environmental policymakers would join the forces with those in charge of the economic and social incentives that shape the production and consumption, to better share the responsibility in finding and delivering solutions and creating a joint ownership for the SDGs related transition. So, we need something like a 'circular update' also to the governance.

**Which brings me to my third and final point: What to call for at the World Circular Economy Forum in April, and all the way to Glasgow, to make it a real difference.**

The UNFCCC conferences, as well as the CBD and other global environmental processes, do not convene those in charge of resource use drivers. And maybe they cannot. These forums are already complex and big, and their task to specify impact targets, reporting frameworks, and so on, is already huge.

**But we do need a global forum, where those with direct policy influence on the resource drivers are obliged to become part of the search for solution efforts. Global alliance, recently established, could be an excellent base and a real drive in this direction. We need a formal, intergovernmental discussion where environmental, economic and social decision makers would discuss the fundamental transitions necessary towards a global economic model that keeps resource use within planetary boundaries - while improving global social equity.**

I cannot say, which exact format this should have and if we need a new UN convention. But I am confident that voluntary alliances and compacts will not be sufficient. The debate needs to be on the multilateral level, so that top economic decision makers feel the pressure – and motivation - to really engage in the solution finding. Of course, I know that coming to a global agreement of any sort might take years, if not decades. However, this is not only about the signed agreement in the end. **It is about the formal and**

**public process**, which will make sustainable resources management the responsibility of all ministries, international institutions and stakeholders.

Ladies and gentleman,

Just yesterday I have had an interview organised to discuss the future potential developments of the WCEF and one of my main messages was: It is important to continue with the initiative, to strengthen its international role and to build bridges, which would help creating ownership and responsibility across countries and policies. This is needed and it is lacking.

So, let's use the WCEF, as well as Glasgow, to kick off the discussion: **How to create a global governance forum, not only when it comes to plastics, where, for example, the appetite is already emerging, but more generally ... to ensure coherent approach to sustainable resource use, and a global economic model that functions inherently within the planetary boundaries.**

I know it would not be easy and I know that the initial reaction of many would be that we do not need another heavy international instrument. But before making any final conclusion, please do **ask yourself a simple question**, would it be useful and would it be actually necessary, if we want to move the sustainability transition to another gear and stop pointing to each other and waiting on each other. In politics finding good excuses sounds attractive, but the real judgment is always subsequent to time. And it is always a good feeling, learning in due time, that one was on the right side of the history.

Dear friends, we have a unique chance and an enormous responsibility to recover better. And circular economy is an essential ingredient if we want to succeed.

Thank you for your attention.