

GLOBAL RESOURCES OUTLOOK

2019 FACT SHEET

NATURAL RESOURCES FOR THE FUTURE WE WANT

Over the past five decades, our global population has doubled, the extraction of materials has tripled and gross domestic product has quadrupled. The extraction and processing of natural resources has accelerated over the last two decades, and accounts for more than 90 per cent of our biodiversity loss and water stress and approximately half of our climate change impacts. Over these last 50 years we have not once experienced a prolonged period of stabilization or a decline in global material demand.

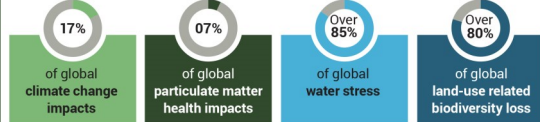


Biomass

Use of biomass 1970 and today (2017)

Extracted 1970 **9 billion tonnes** Extracted 2017 **24 billion tonnes**
 Biomass extraction has increased **2.7-fold** between 1970-2017

Impacts of extraction and primary processing today (2017) - in shares of total global impact (see also figure 4)



“While virtually none of the massive growth in materials consumption in the new millennium has gone to the wealthiest countries, neither has much of it gone to the poorest countries, the group in most urgent need of higher material living standards.”

The majority of growth in resource extraction has occurred in upper-middle income countries, who increased their global share of domestic material consumption from 33 per cent in 1970 to 56 per cent in 2017. Per capita levels of direct material consumption of this group surpassed those of the high-income countries in 2012.

However, the Material Footprint —the quantity of materials that must be mobilized globally to meet the consumption of an individual country— tell a different story. On a per capita basis, the high-income group maintains levels of material footprint consumption that are 60 per cent higher than the upper-middle income group, and thirteen times the level of the low-income groups.

“On a per capita basis, the high-income countries are reliant on 9.8 tonnes of primary materials mobilized elsewhere in the world.”

Two major dynamics are at play – newly industrializing countries are building new infrastructure, and higher-income countries are outsourcing the more material and energy intensive stages of production. High-income regions also import resources and materials and outsource the production-related environmental impacts to middle- and low-income countries.

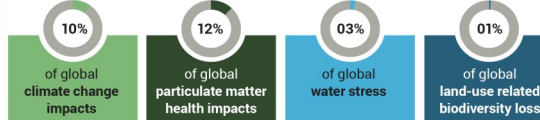


Metals

Use of metals 1970 and today (2017)

Extracted 1970 **2.6 billion tonnes** Extracted 2017 **9.1 billion tonnes**
 Metals extraction has increased **3.5 times** between 1970 - 2017

Impacts of extraction and primary processing today (2017) - in shares of total global impact

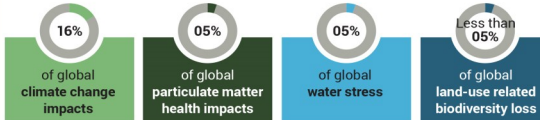


Fossil Fuels

Use of fossil fuels 1970 and today (2017)

Extracted 1970 **6 billion tonnes** Extracted 2017 **15 billion tonnes**
 Fossil fuel extraction was **2.5 times higher** in 2017 than in 1970.

Impacts of extraction and primary processing today (2017) - in shares of total global impact

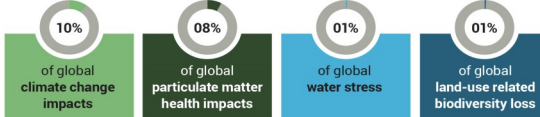


Non-metallic minerals (mainly sand, gravel and clay)

Use of non-metallic minerals 1970 and today (2017)

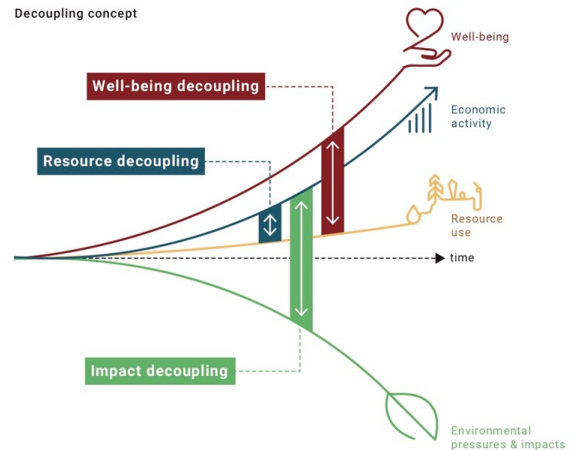
Extracted 1970 **9 billion tonnes** Extracted 2017 **44 billion tonnes**
 Non-metallic minerals extraction was **4.9 times higher** in 2017 than in 1970, which represents the highest growth rate of all resource groups

Impacts of extraction and primary processing today (2017) - in shares of total global impact

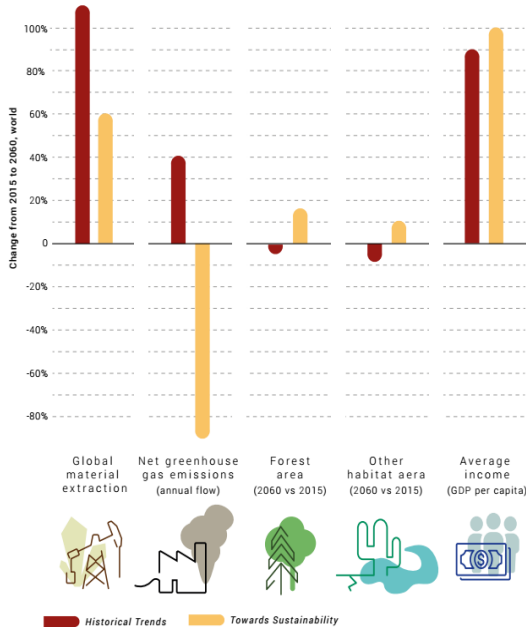




The decoupling of natural resource use and environmental impacts from economic activity and human well-being is an essential element in the transition to a sustainable future. Achieving decoupling is possible and can deliver substantial social and environmental benefits, including repair of past environmental damage, while also supporting economic growth and human well-being. Policy interventions, environmentally sound technologies, sustainable financing schemes, capacity-building, and public-private partnerships can all contribute.



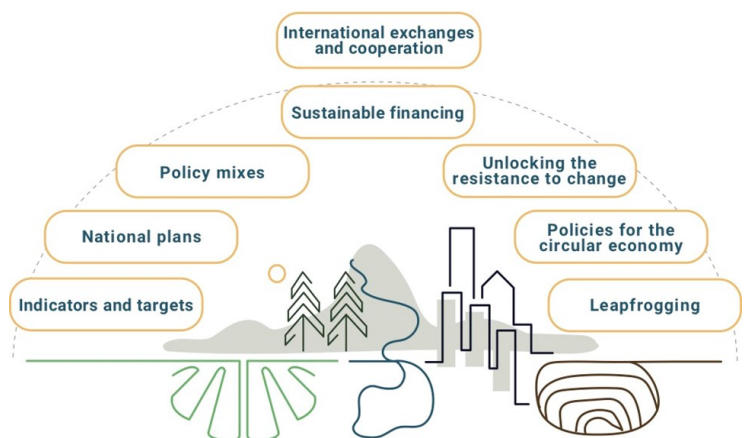
“Decoupling and a sustainable future will not happen spontaneously. In the absence of urgent and concerted action, rapid growth and inefficient use of natural resources will continue to create unsustainable pressures.”



A scenario developed by the International Resource Panel on *Historical Trends* shows that, unless a fundamental change towards decoupling drives natural resource use away from the status quo, resource use will continue to grow to 190 billion tons and over 18 tons per capita by 2060. Moreover, greenhouse gas emissions increase by 43 per cent from 2015 to 2060, industrial water withdrawals increase by up to 100 per cent from 2010 levels, and the area of agricultural land increases by more than 20 per cent in that time, reducing forests by over 10 per cent and other habitat (such as grasslands and savannahs) by around 20 per cent.

“[Resource Efficiency Policies] + [Climate Mitigation and Removal Policies] + [Landscape and Biodiversity Protection] + [Healthy Diets and Reduced Food Waste] = Towards Sustainability ”

Under the IRP *Towards Sustainability* scenario, policy interventions slow the growth of resource use, incomes and other well-being indicators improve, while key environmental pressures fall. This boosts economic growth by 8 per cent, outweighs the near-term economic costs of shifting to a 1.5 degree Celsius climate pathway and delivers more equal distribution of income and access to resources.



A multi-beneficial approach offers policymakers a range of choices for developing comprehensive strategies to respond effectively to the challenges of sustainable natural resource management. Working together across borders, countries can engage in the international exchanges and cooperation that can contribute to the achievement of the transformation we need for the future we want.