GLOBAL RESOURCES OUTLOOK 2019

UN environment

International Resource Panel

Key messages

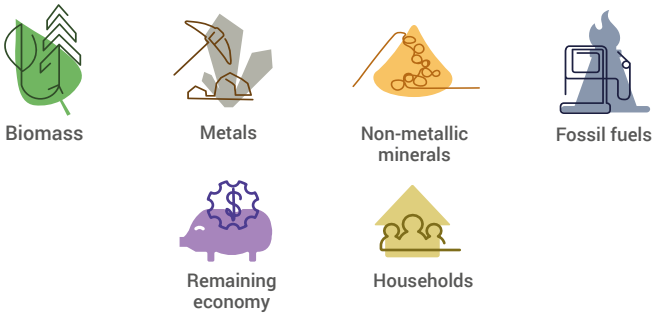
01. The use of natural resources has more than tripled from 1970 and continues to grow.

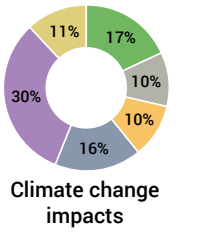
02. Historical and current patterns of natural resource use are resulting in increasingly negative impacts on the environment and human health.

The extraction and processing* of materials, fuels and food make up about **half of total global greenhouse gas emissions** (not including climate impacts related to land use) and **more than 90 % of biodiversity loss and water stress**.

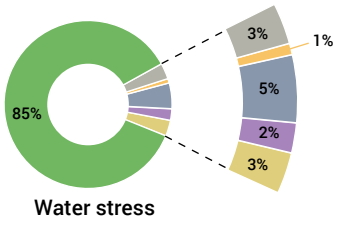
An estimated **11 % of global species were lost by 2010** due to global land use.

* The focus is on resource extraction and processing up to "ready-to-use" materials and fuels (including waste disposal processes in the extraction and processing phase). This is also termed 'cradle-to-gate'.

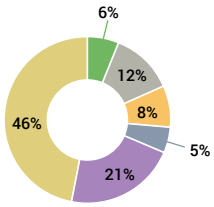




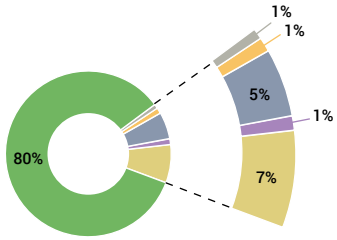
Climate change impacts



Water stress



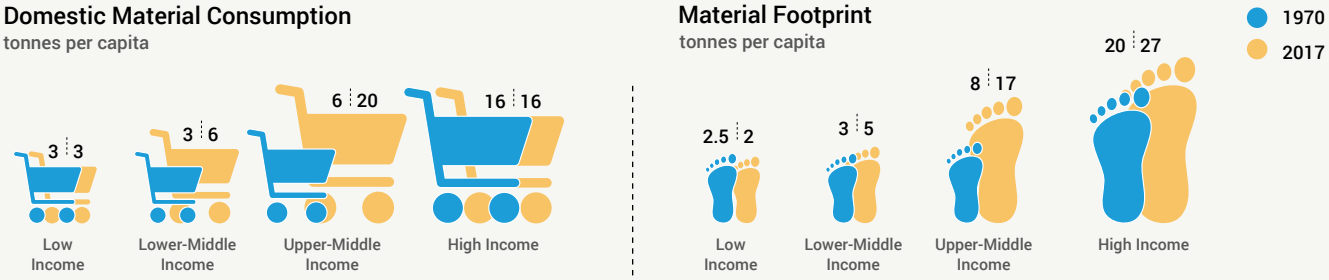
Particulate matter health impacts



Land-use related biodiversity loss

03. The use of natural resources and the related benefits and environmental impacts are unevenly distributed across countries and regions.

The ratio of high-income countries' per capita GDP to low-income countries' per capita GDP doubled over the period as a whole, signalling rising income and wealth inequality among and within wealthy and poor economies.



Impacts Per capita impacts of consumption in high-income countries are, depending on the impact category, between **three and six times larger** than those of low-income countries.

04. In the absence of urgent and concerted action, rapid growth and inefficient use of natural resources will continue to create unsustainable pressures on the environment.

From 2015 to 2060, *Historical Trends*:

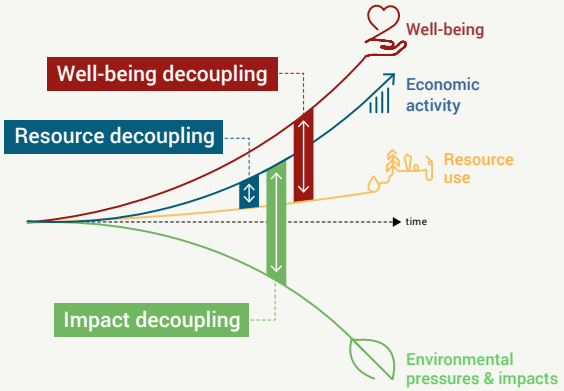
- ↑ more than **doubles** — Global material extraction
- ↑ increases by **43%** — Greenhouse gas emissions
- ↑ increases by more than **20%** — Area of agricultural land
- ↑ increases by **25%** — Global pasture land
- ↓ reduces by over **10%** — Forests
- ↓ reduces by around **20%** — Other natural habitat

05. 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.

Absolute decoupling in high-income countries can lower average resource consumption, distribute prosperity equally and maintain a high quality of life.

Relative decoupling in developing economies and economies in transition can raise average income levels and eliminate poverty, while still increasing levels of natural resource consumption until a socially acceptable quality of life is achieved.

Decoupling will not happen spontaneously, but will require well-designed and concerted policy packages.



06. 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.

Well-designed and concerted policy packages can lead to:

- ↑ US$ 233 trillion **8%** above *Historical Trends* — Global GDP
- ↓ **25%** lower than *Historical Trends* — Global material extraction
- ↓ decrease by **90%** — Greenhouse gas emissions
- ↓ **9%** less than *Historical Trends* — Area of agricultural land
- ↓ **30%** less than *Historical Trends* — Global pasture land
- ↑ increases by **11%** — Area of forest and other natural habitat

07. Policymakers and decision makers have tools at their disposal to advance worthwhile change, including transformational change at local, national and global scales.

Resource efficiency + **Climate mitigation and removal** + **Landscape and biodiversity protection** + **Healthy diets and reduced food waste**

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Towards Sustainability and Decoupling

08. International exchanges and cooperation can make important contributions to achieving systemic change.

International exchanges and cross-country cooperation can accelerate transitions towards sustainable natural resource use, support national decision-making and create a level playing field for goods and services from different countries.

These different aspects call for a global discussion.