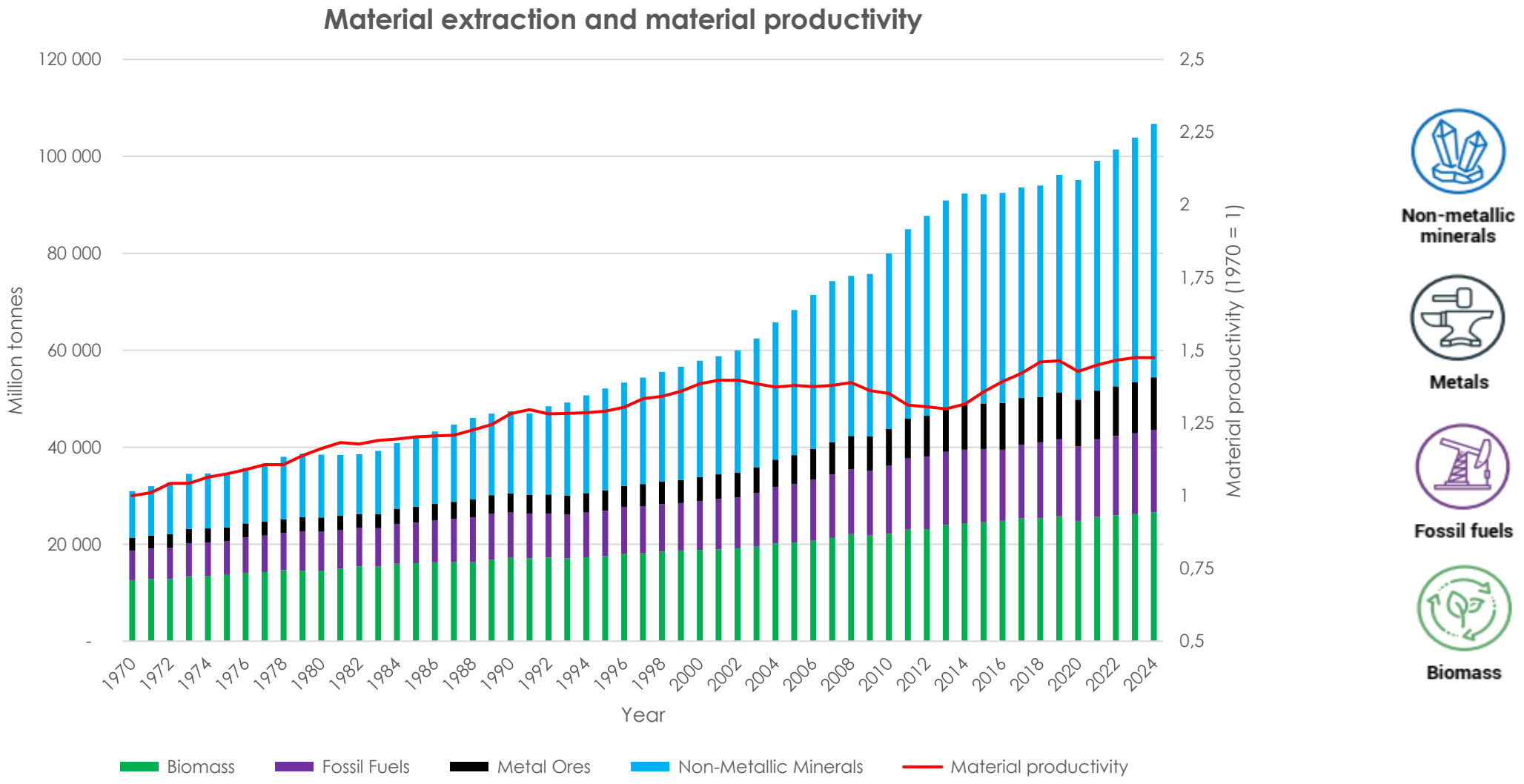
Insights from Global Resources Outlook 2024

21st November 2024

Circular Economy Summit

Resource use is rising (almost) faster than ever, while productivity stagnates



Source: International Resource Panel (2024), Global Resources Outlook 2024 (https://www.resourcepanel.org/reports/global-resources-outlook-2024)

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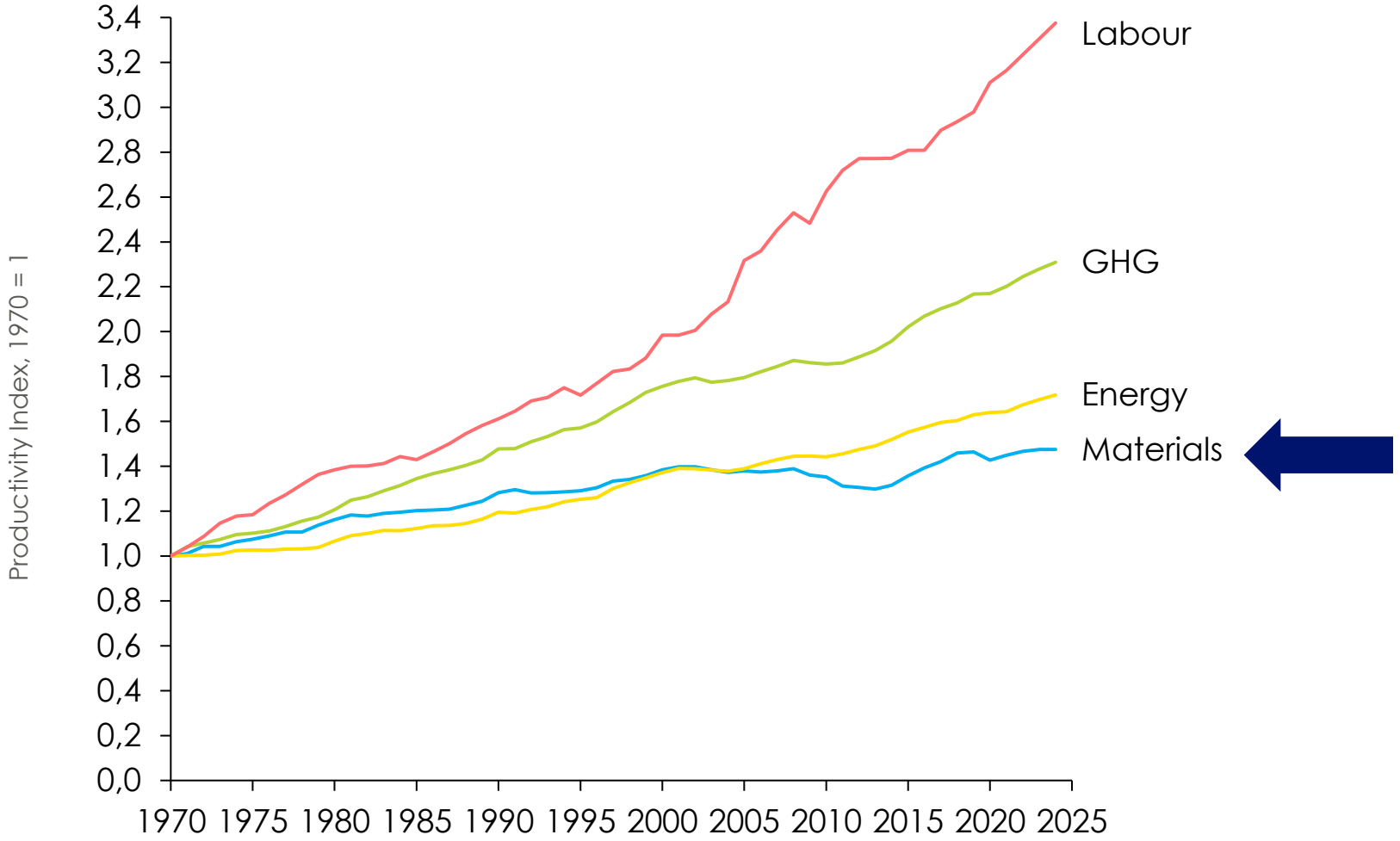
Meanwhile, other productivities soar…



Material Productivity: ratio of GDP to domestic material consumption (DMC)

Source: International Resource Panel (2024), Global Resources Outlook 2024 (https://www.resourcepanel.org/reports/global-resources-outlook-2024)

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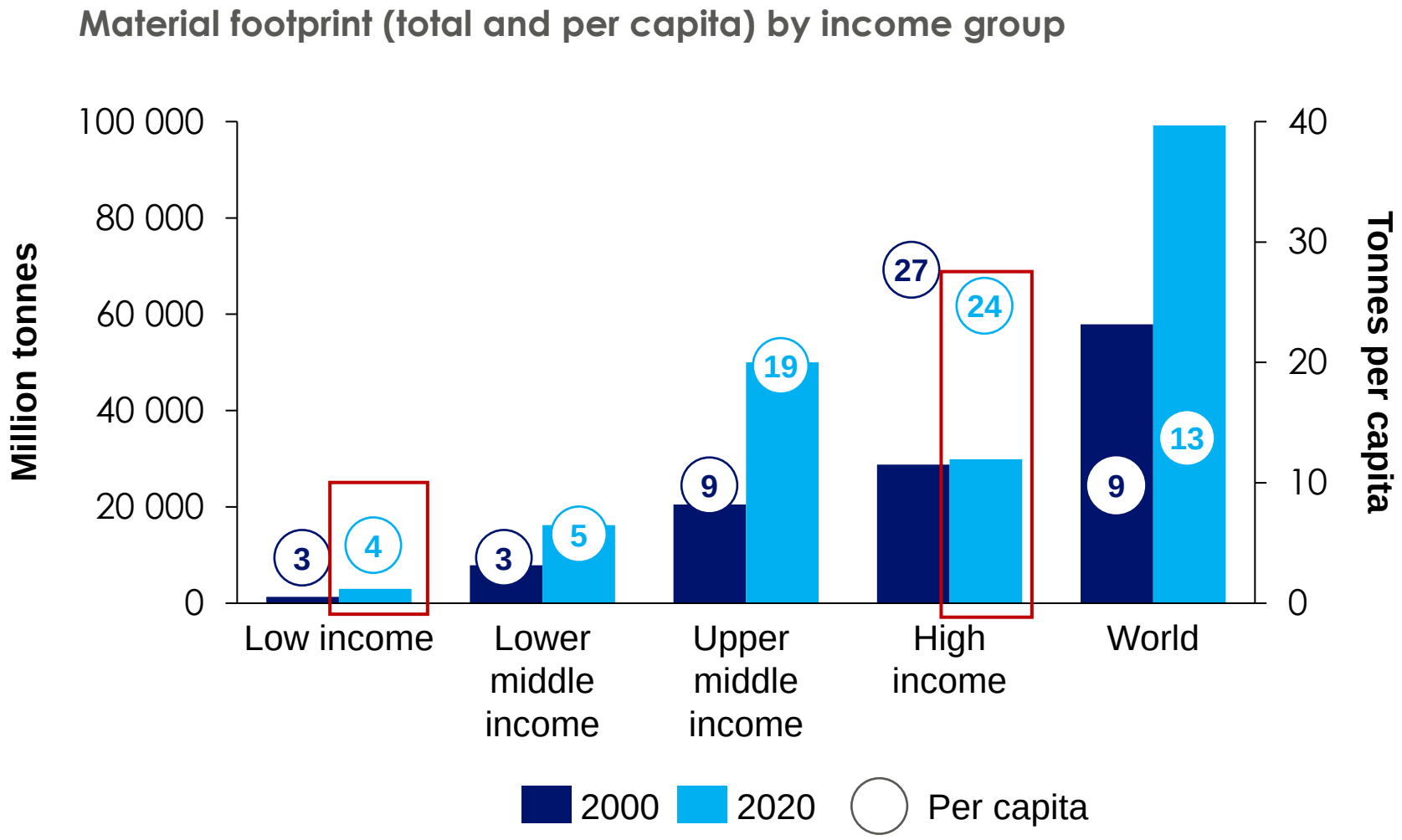
High-income countries use six times more materials per capita than low-income countries…



Source: International Resource Panel (2024), Global Resources Outlook 2024 (https://www.resourcepanel.org/reports/global-resources-outlook-2024)

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…And it's driving climate change, biodiversity loss, pollution, and water stress

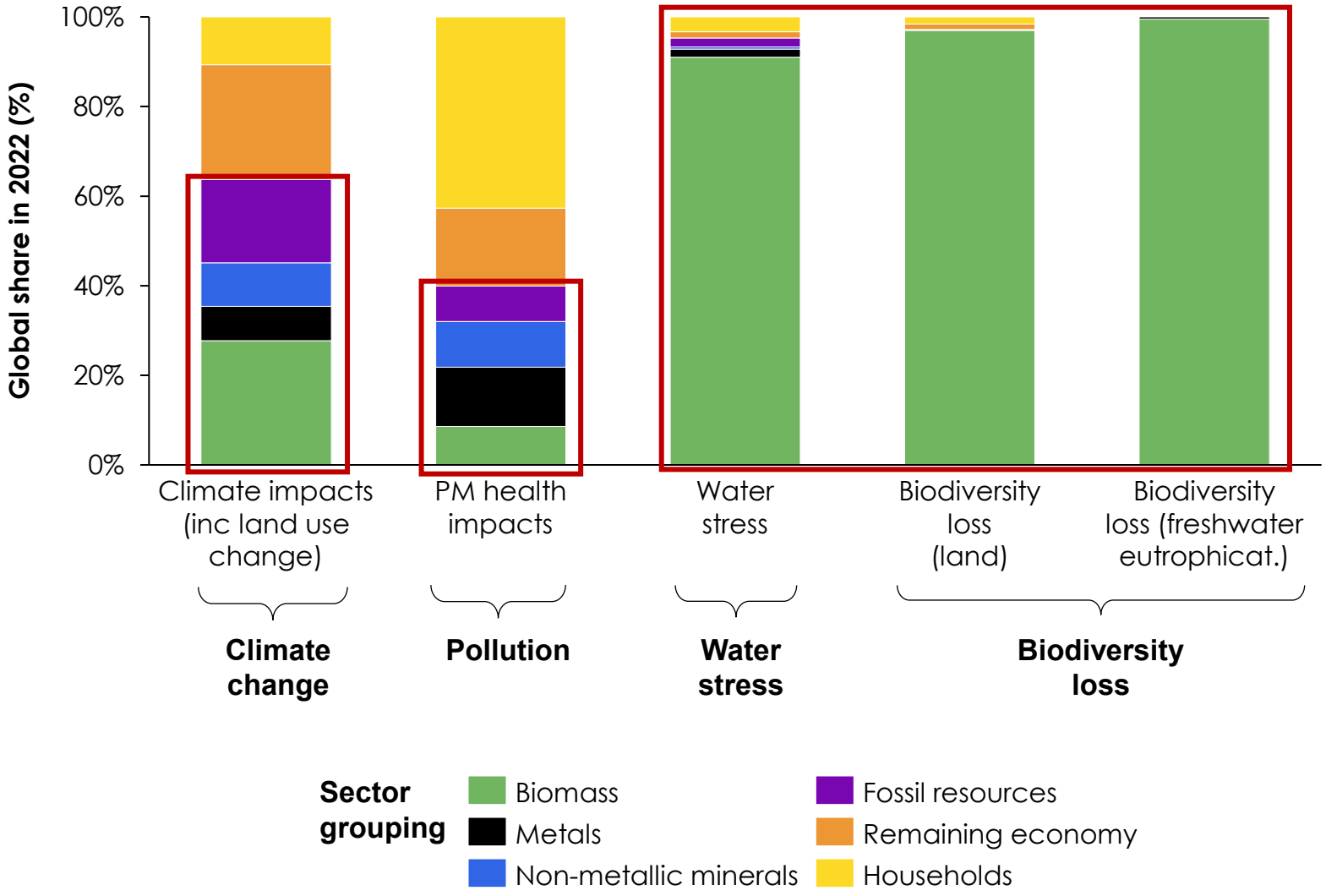
Environmental impacts of materials in the value chain in **extraction and processing** phase

- Households
- Remaining Economy
- Fossil Resources
- Non-Metallic minerals
- Metals
- Biomass

60% of global climate change impacts including land use change

40% of air pollution health impacts

> **90%** of water stress and global land and water eutrophication related biodiversity loss



Source: International Resource Panel (2024), Global Resources Outlook 2024 (https://www.resourcepanel.org/reports/global-resources-outlook-2024)

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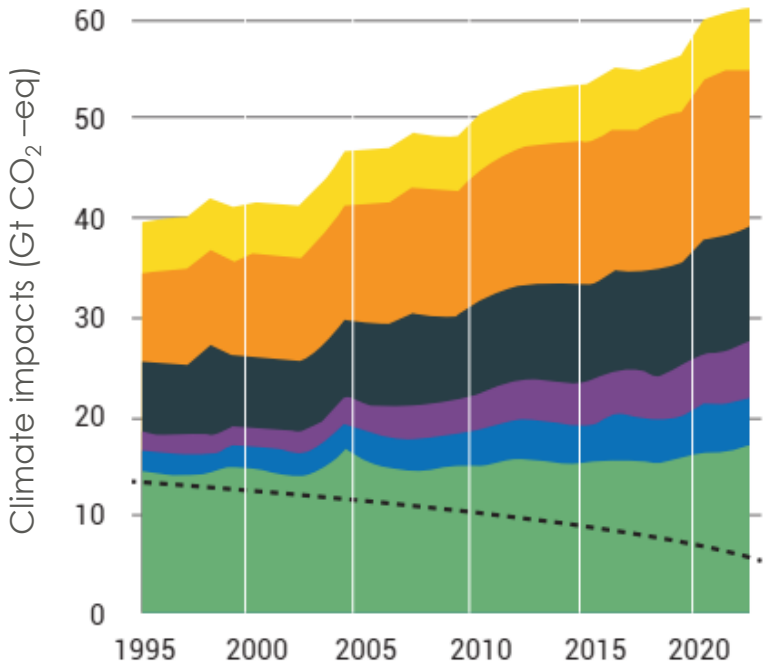
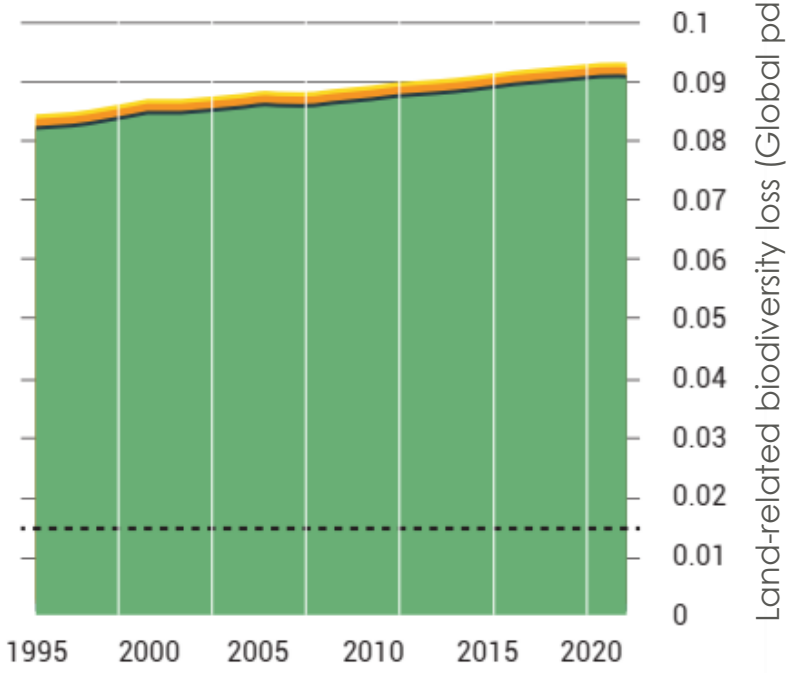
Impacts are increasing, and massively exceed globally agreed targets

Climate impact



Biodiversity impact



* Global pdf: Global potentially disappeared fraction of species

Source: International Resource Panel (2024), Global Resources Outlook 2024 (https://www.resourcepanel.org/reports/global-resources-outlook-2024)

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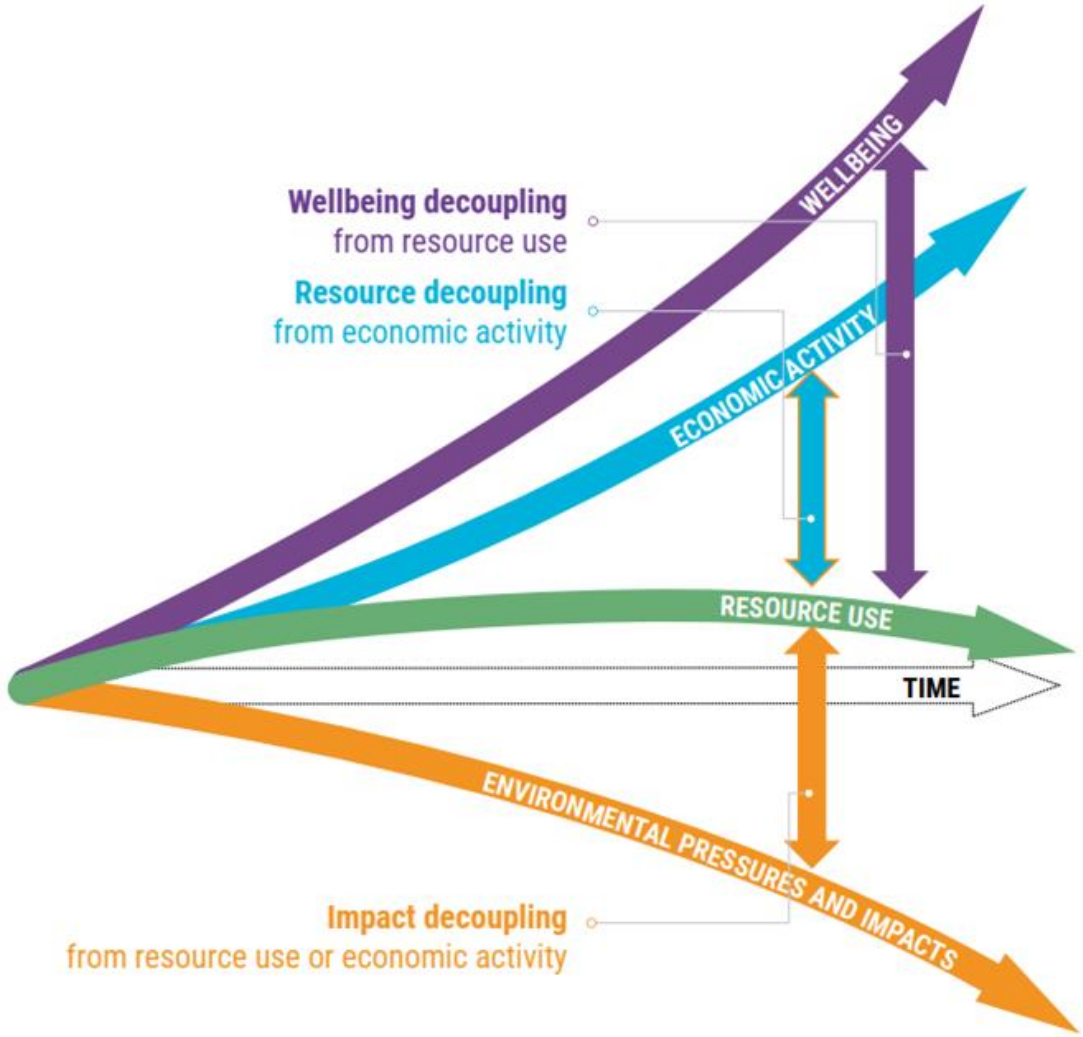
The solution: decoupling resource use from economic activity and human wellbeing



Source: International Resource Panel (2024), Global Resources Outlook 2024 (https://www.resourcepanel.org/reports/global-resources-outlook-2024)

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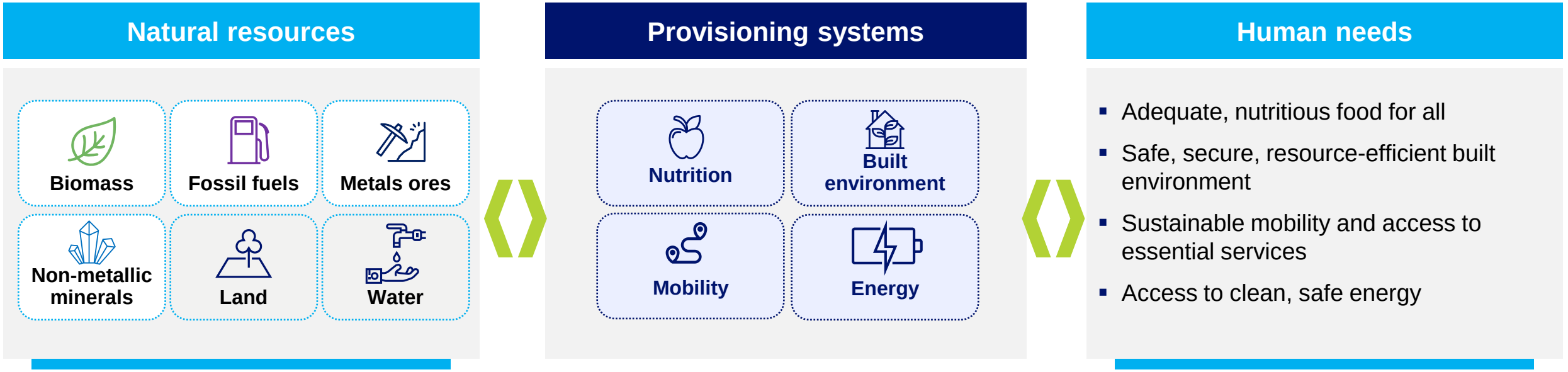
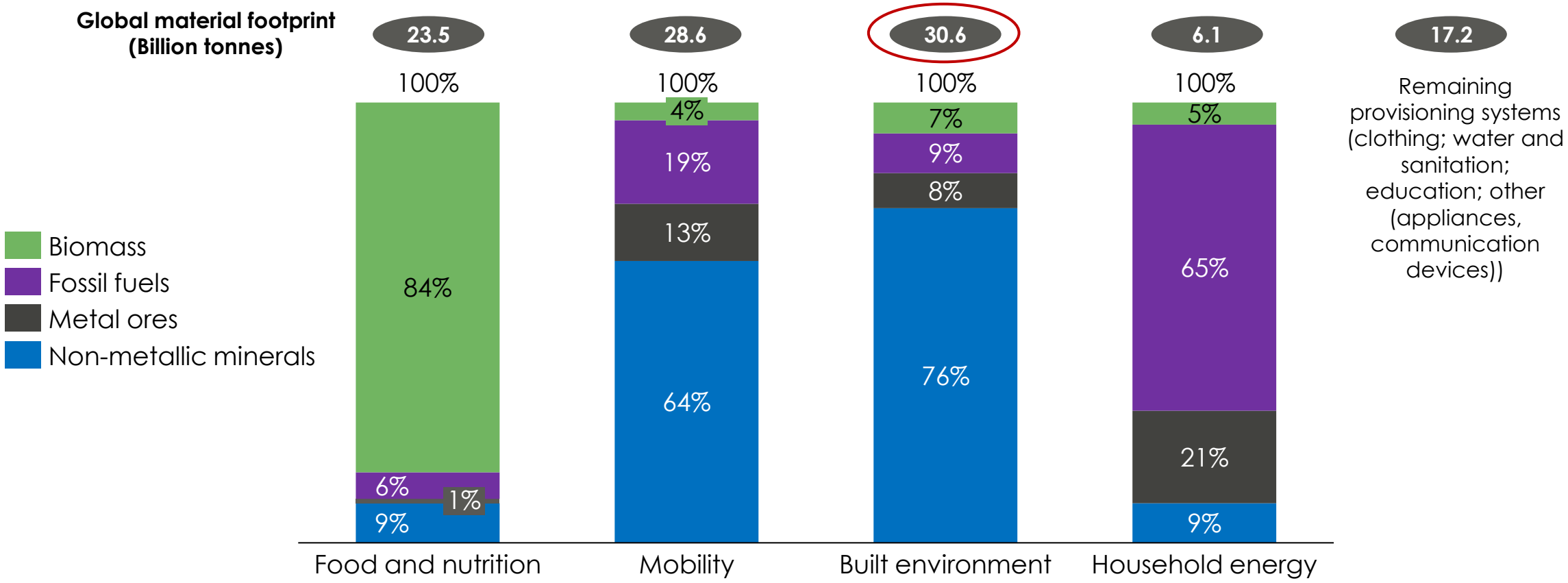
Resources should be targeted to human needs through **provisioning systems**



Adapted from: IRP Co-Chairs (2022). Making climate targets achievable: improving wellbeing through reduced absolute resource use. Potočnik, J., Teixeira, I. An opinion piece of the International Resource Panel Co-Chairs (supported by Systemiq)

Major provisioning systems have different material footprint breakdowns

Material footprint by provisioning system and material type (2022)



(*All provisioning systems include material footprints of energy embodied along their value chains; household energy solely represents energy directly used by consumers. Mobility includes infrastructure such as roads/highways.*)

Source: International Resource Panel, Global Resources Outlook 2024 (https://www.resourcepanel.org/reports/global-resources-outlook-2024)

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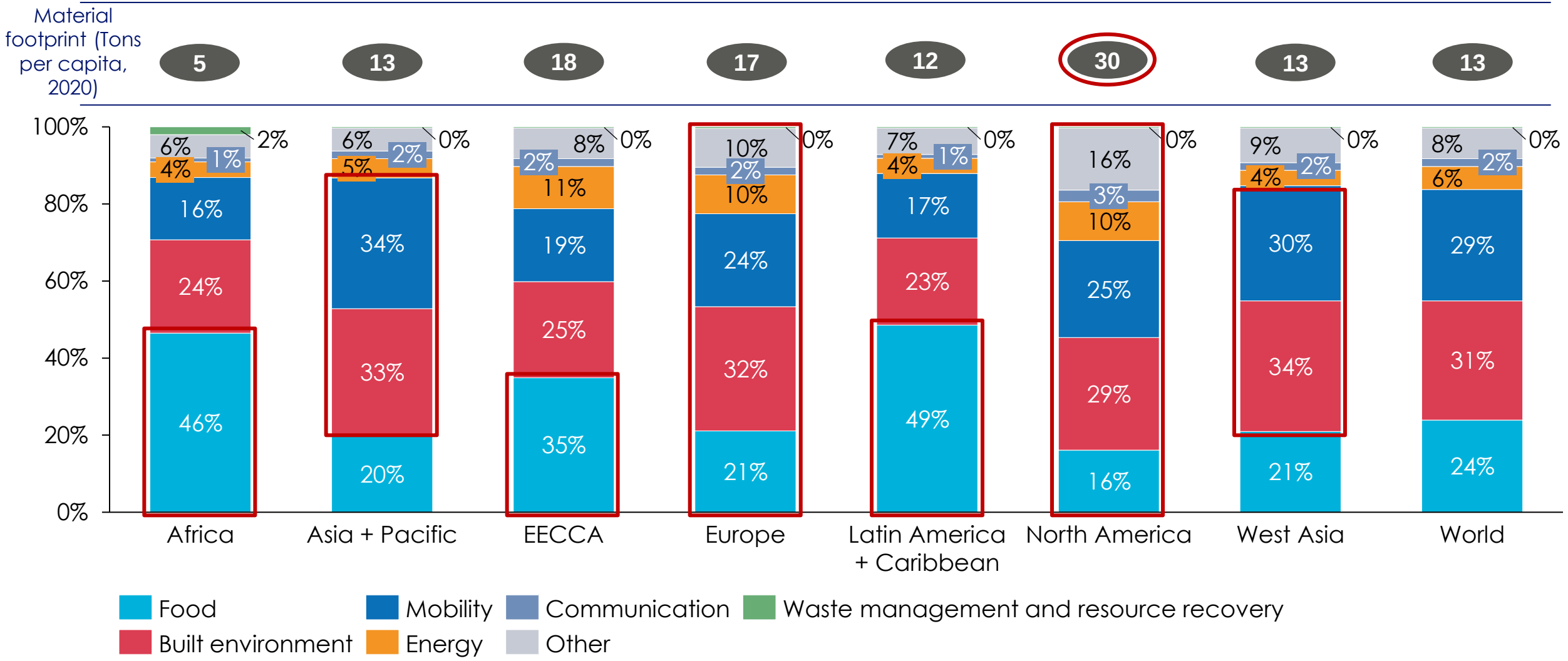
World regions have differing provisioning system breakdowns

Material needs for provisioning systems (built environment, mobility, energy and food) by world region (2020)



- 'Energy' represents household energy consumption
- All other provisioning systems include their embodied energy

Source: International Resource Panel, Global Resources Outlook 2024 (https://www.resourcepanel.org/reports/global-resources-outlook-2024)
Global Material Flows Database (UNEP 2023)

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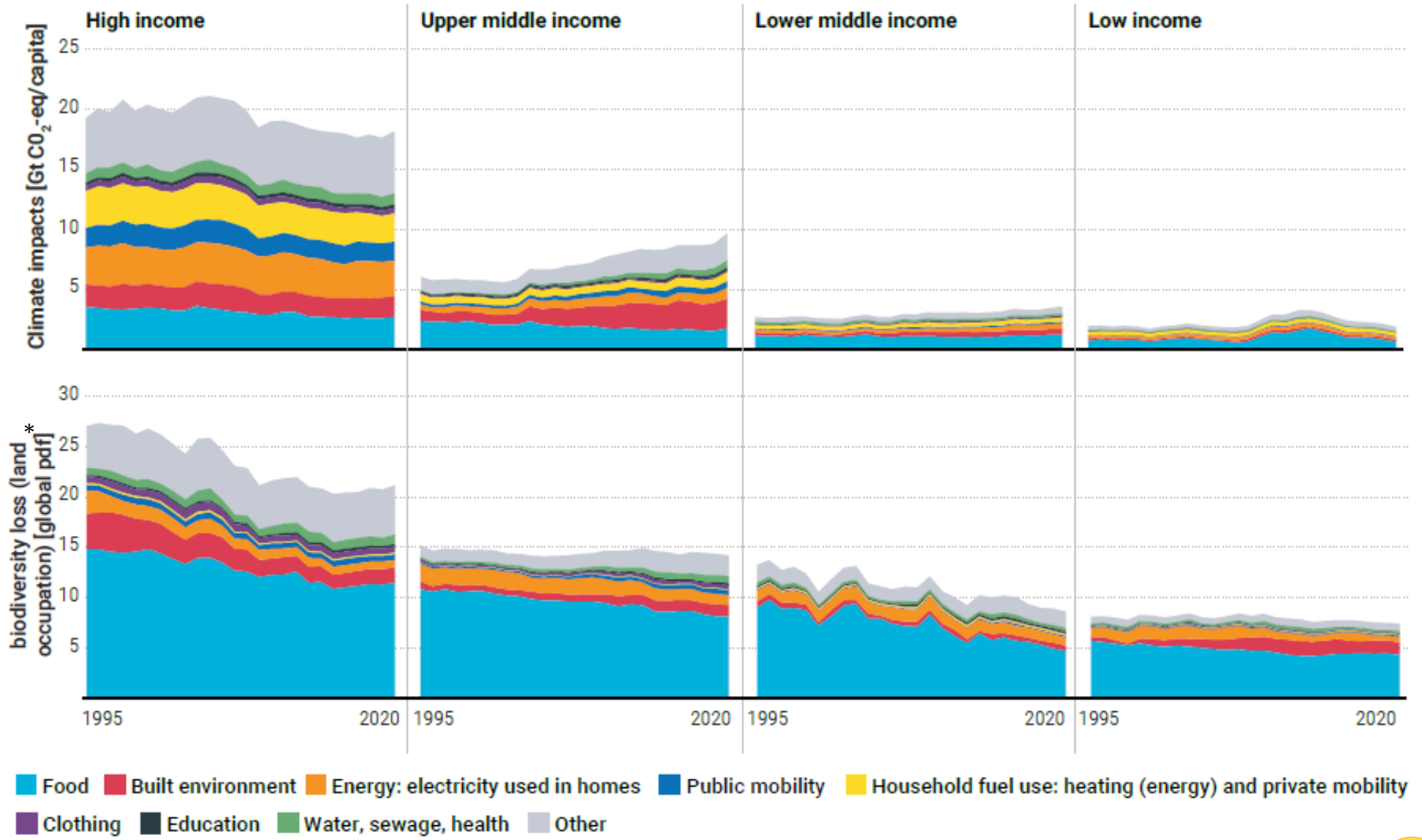
High-income countries drive ten times ten times more climate impacts per capita than low-income countries



*Global pdf: Global potentially disappeared fraction of species
Source: International Resource Panel, Global Resources Outlook 2024 (https://www.resourcepanel.org/reports/global-resources-outlook-2024)

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Sustainability Transition Scenario is built up as three ‘shifts’ plus measures to support just transition, and measures to optimise key provisioning systems

Source: International Resource Panel (2024), Global Resources Outlook 2024 (https://www.resourcepanel.org/reports/global-resources-outlook-2024)

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It is possible to mitigate future resource use while growing the economy, improving well-being and dramatically reducing environmental impacts

2060 outcomes from Sustainability Transition scenario, compared to continued Historical Trends:

Growing Economy	:	+ 3%
Reduced inequality	:	Lower income group Material Footprint gap
Improved wellbeing	:	Higher HDI all income groups
Reduced growth in resource use	:	By 30%
Reduced environmental impacts	:	GHG emissions - 83% (compared to 2020) Energy demand - 27% (compared to 2020) Agricultural land area - 5% (compared to 2020)

Source: International Resource Panel (2024), Global Resources Outlook 2024 (https://www.resourcepanel.org/reports/global-resources-outlook-2024)

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Bold policy action can make the Sustainability Transition Scenario real

Source: International Resource Panel (2024), Global Resources Outlook 2024 (https://www.resourcepanel.org/reports/global-resources-outlook-2024)

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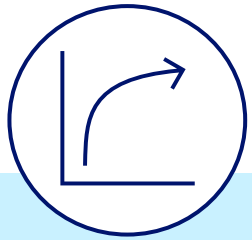
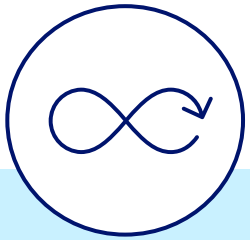
What can business work towards in the long-term?



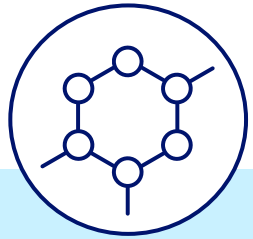
Flattening the Curve of Future Demand:

Adopt **circular economy approaches** to **reduce unnecessary consumption**, promote material reuse, and redesign products for maximum material value retention.



Transitioning Towards Renewable Resources:

Shift **away from destructive extraction systems** and nonrenewable resources towards renewable and regenerative sources.



Optimizing Resource-Intensive Systems:

Target well-being and **improve quality of life** by optimizing resource-intensive systems that serve essential human needs, ensuring smart resource utilization.

Source: Global Resources Outlook 2024: Implications for Business (https://www.wbcsd.org/resources/global-resources-outlook-gro-2024-implications-for-business/)

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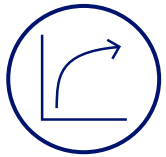
Actions to meet long-term objectives



Flattening the Curve of Future Demand

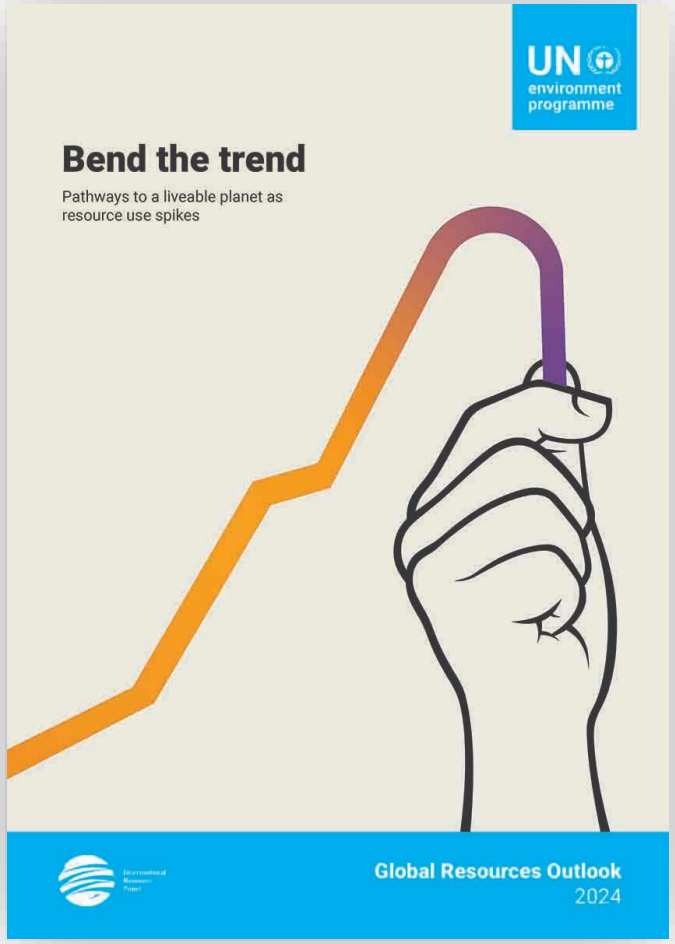
Transitioning Towards Renewable Resources

Optimizing Resource-Intensive Systems

1. Incorporate decoupling into business strategy
2. Adopt circular and resource-efficient business models
3. Increase investment in renewable energy and regenerative agricultural practices
4. Enhance supply chain transparency
5. Perform resource efficiency audits and retrofits

Source: Global Resources Outlook 2024: Implications for Business (https://www.wbcsd.org/resources/global-resources-outlook-gro-2024-implications-for-business/)

Global Resources Outlook 2024



Bend the trend

Pathways to a liveable planet as resource use spikes

Download the report

https://www.resourcepanel.org/reports/global-resources-outlook-2024
https://www.unep.org/resources/Global-Resource-Outlook-2024

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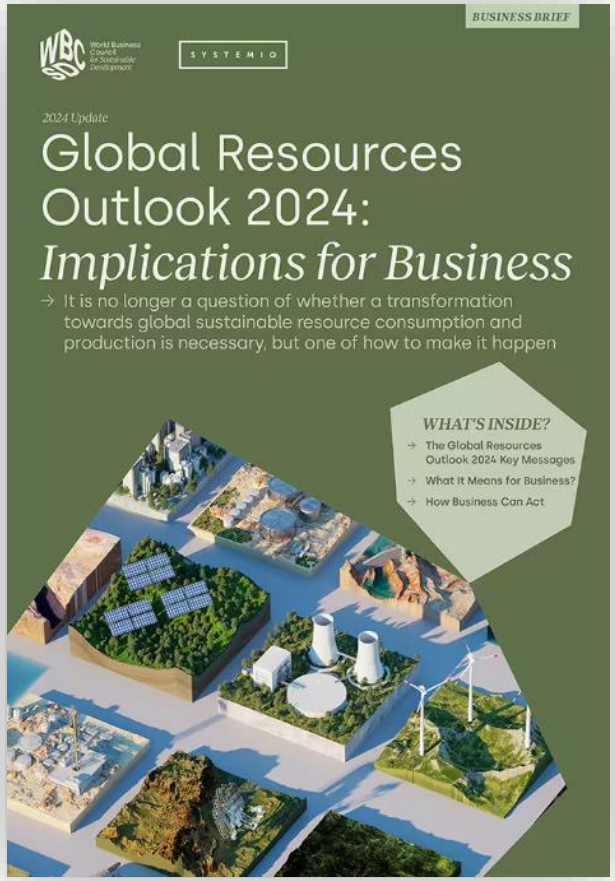
Global Resources Outlook 2024: Implications for Business



Download the Business Brief

https://www.wbcsd.org/resources/global-resources-outlook-gro-2024-implications-for-business/

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Thanks for your attention!