

Materials and Energy 2060

Mark Intven
Policy Advisor

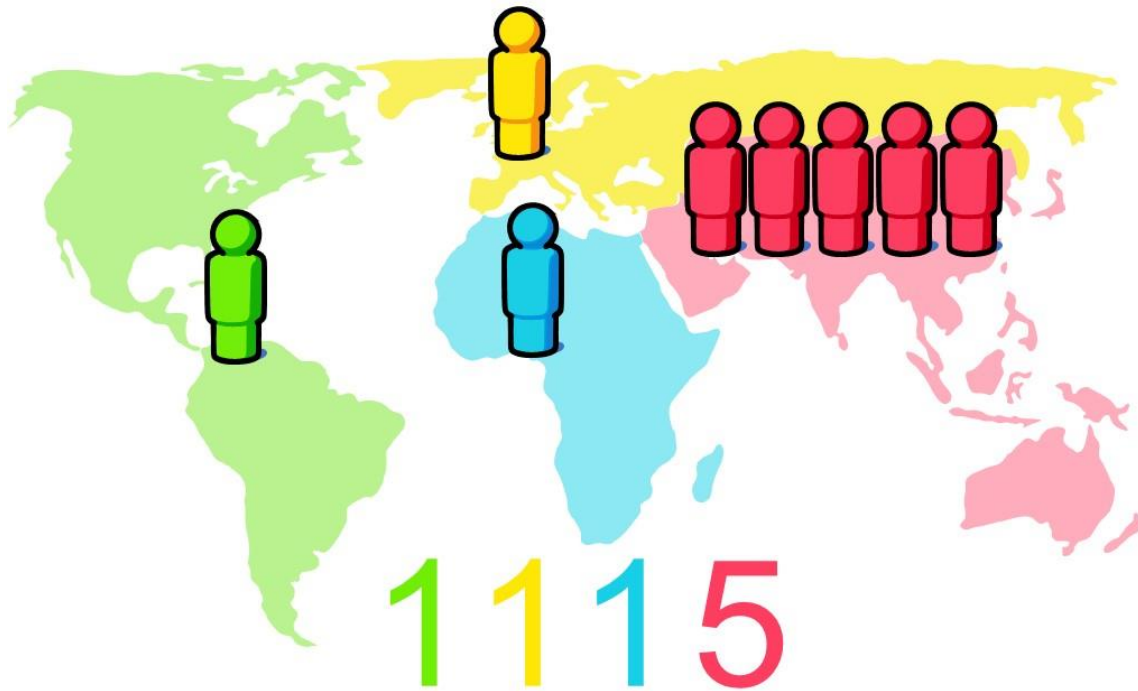


VNCI

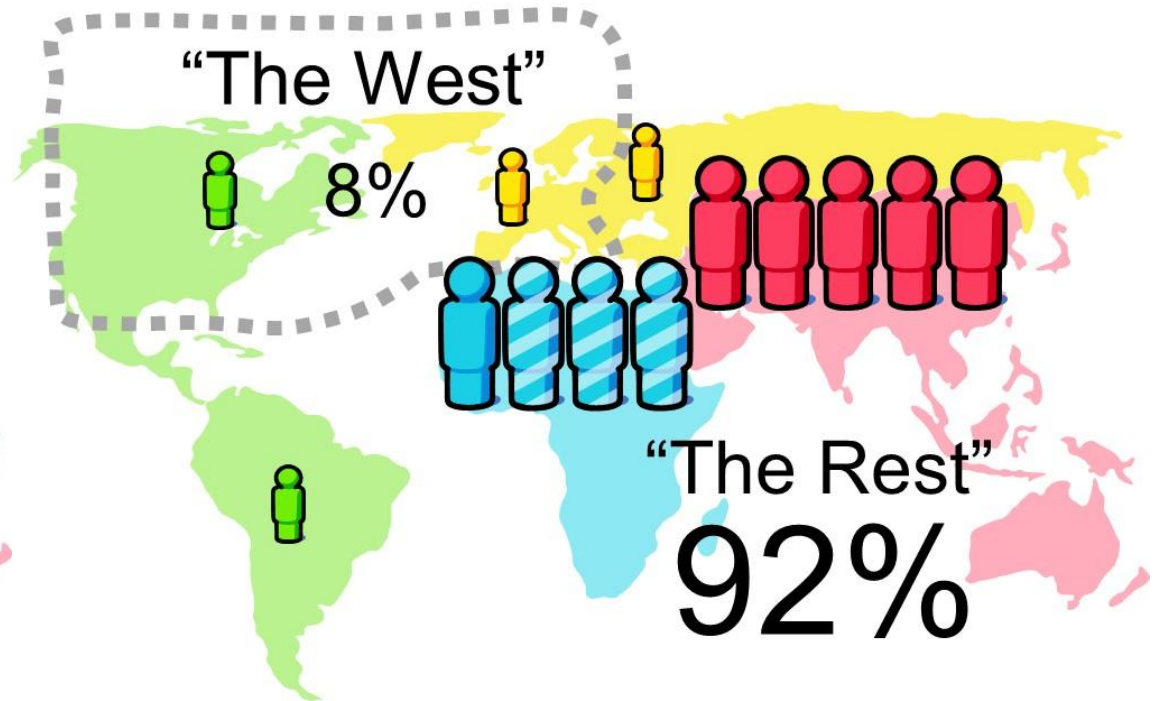
Koninklijke Vereniging
van de Nederlandse
Chemische Industrie

Population development by region

World Population 2022



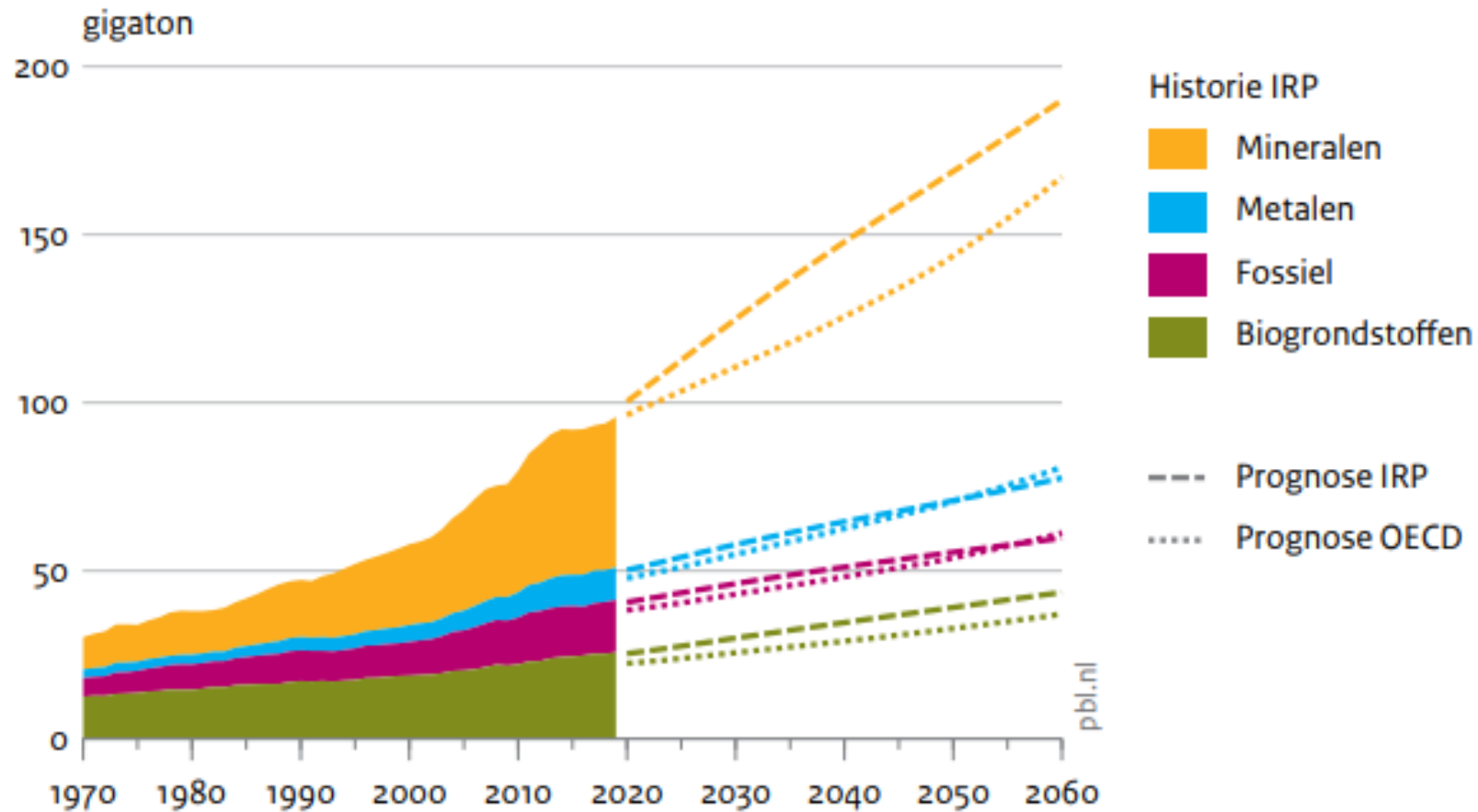
World Population 2080



Appetite for resources?

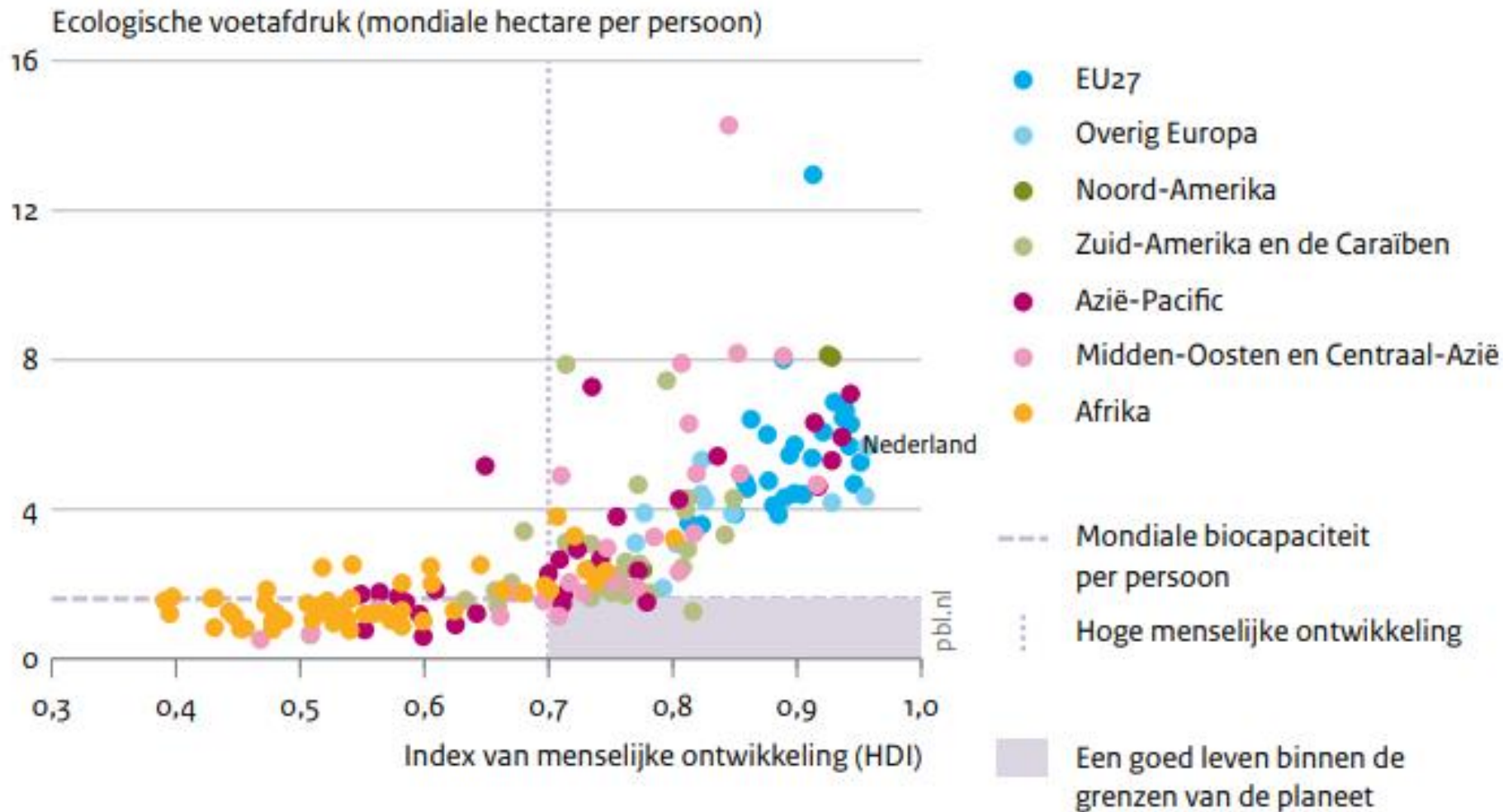
Mondiaal grondstoffengebruik

Trend



Ecological Footprint vs Human Development Index (HDI)

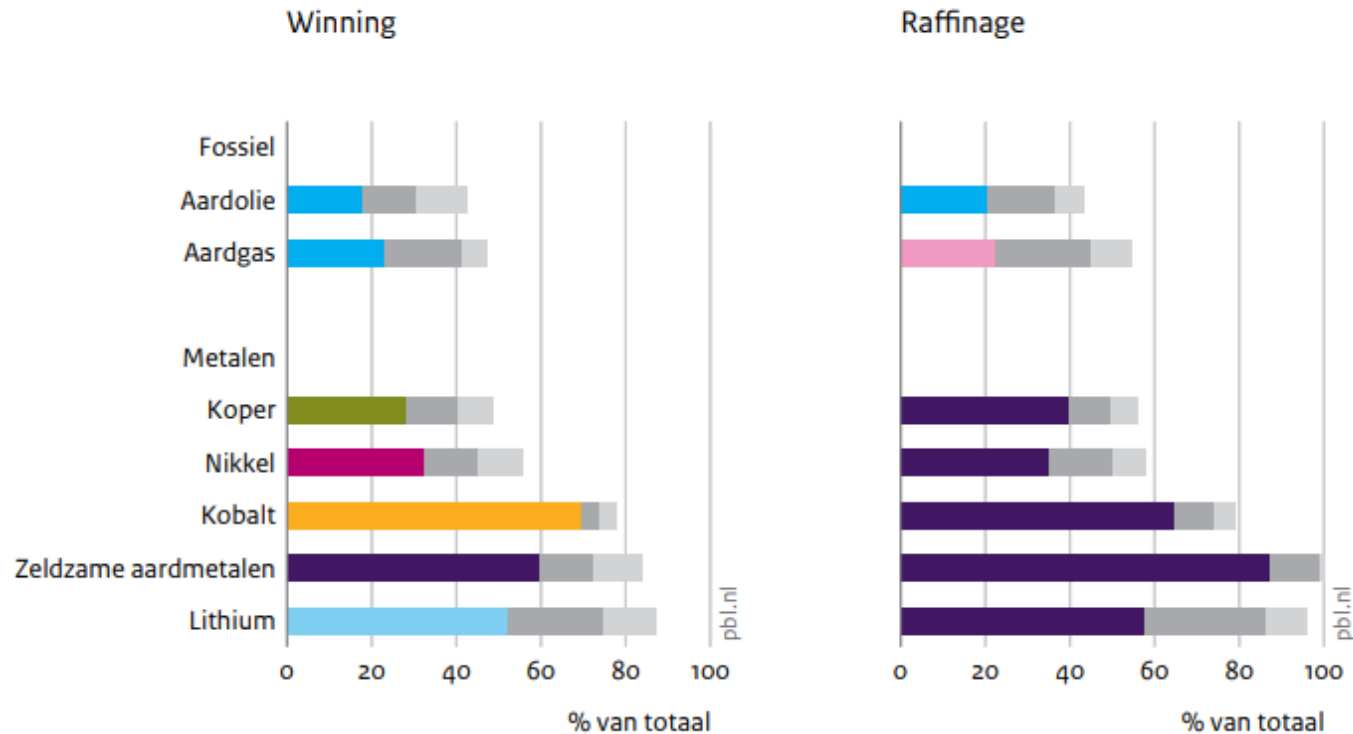
Menselijke ontwikkeling en ecologische voetafdruk van landen, 2018



Bron: Global Footprint Network, UNDP

Ensuring supply reliability and resiliency

Top-3 landen in winning en raffinage van fossiele brandstoffen en metalen, 2019



Grootste producent

- Verenigde Staten
- Chili
- Indonesië
- Congo

- China
- Australië
- Qatar

- Een-na-grootste producent
- Twee-na-grootste producent

Bij raffinage wordt met aardgas LNG-export bedoeld

EU policies

Going circular

- Circular Economy Action Plan
- Packaging and Packaging Waste Regulation
- Waste Framework Directive
- Single Use Plastics Directive
- Bioeconomy Action Plans

Going climate neutral

- Renewable Energy Directive
- Energy Efficiency Directive
- EU ETS system
- Energy Tax Directive
- Sustainable Carbon Cycles

Shifting to safer and more sustainable chemicals

- Ecodesign for Sustainable Products Regulation
- Chemicals Strategy for Sustainability
- Safe and Sustainable by Design
- Zero Pollution Action Plan

