



# OECD ENVIRONMENTAL OUTLOOK

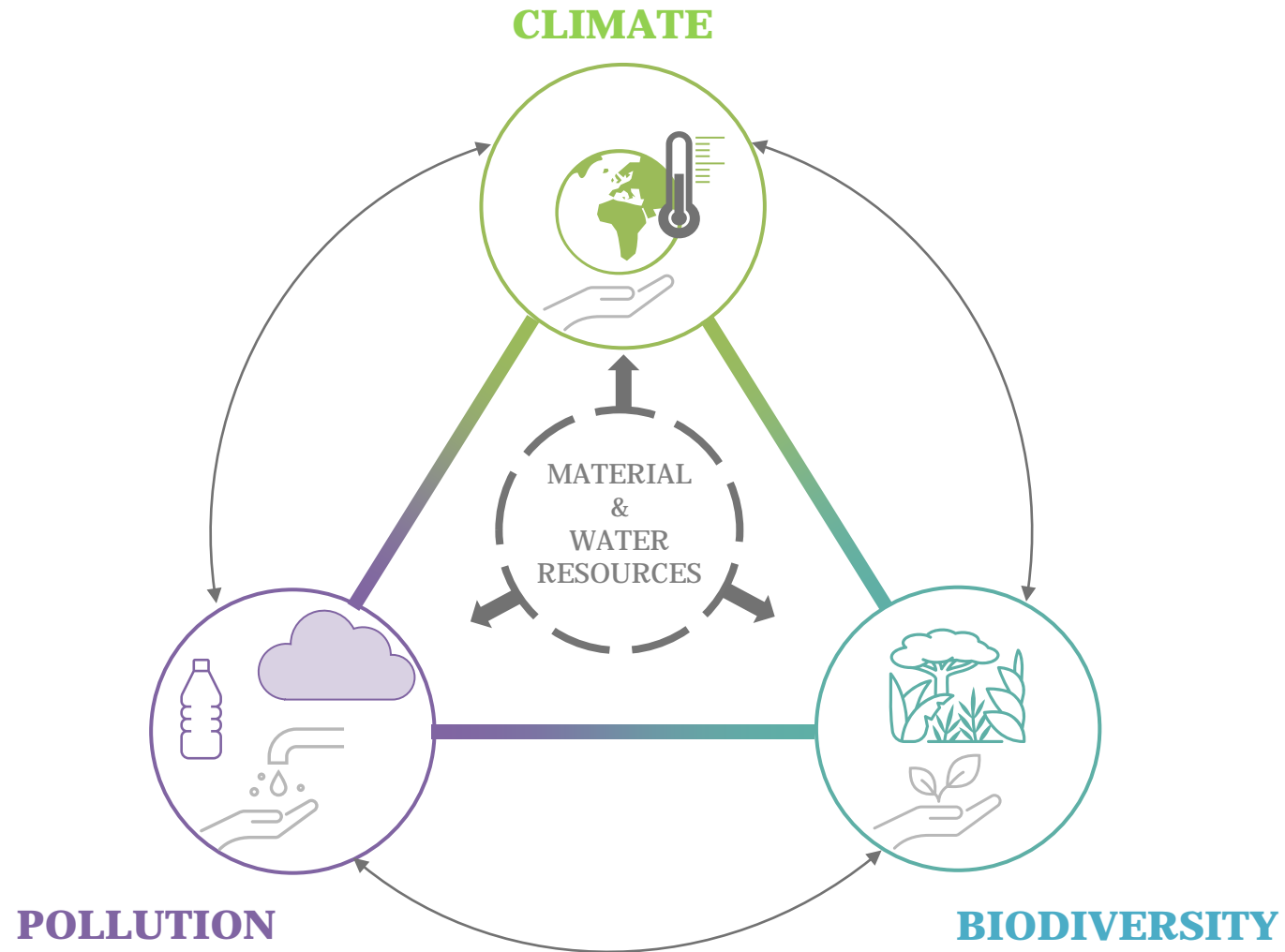
Modelling the triple planetary crisis of climate change, biodiversity, and pollution

Toon Vandyck, OECD Environment Directorate

TFIAM 53, Paris  
16 April 2024




# The Triple Planetary Crisis



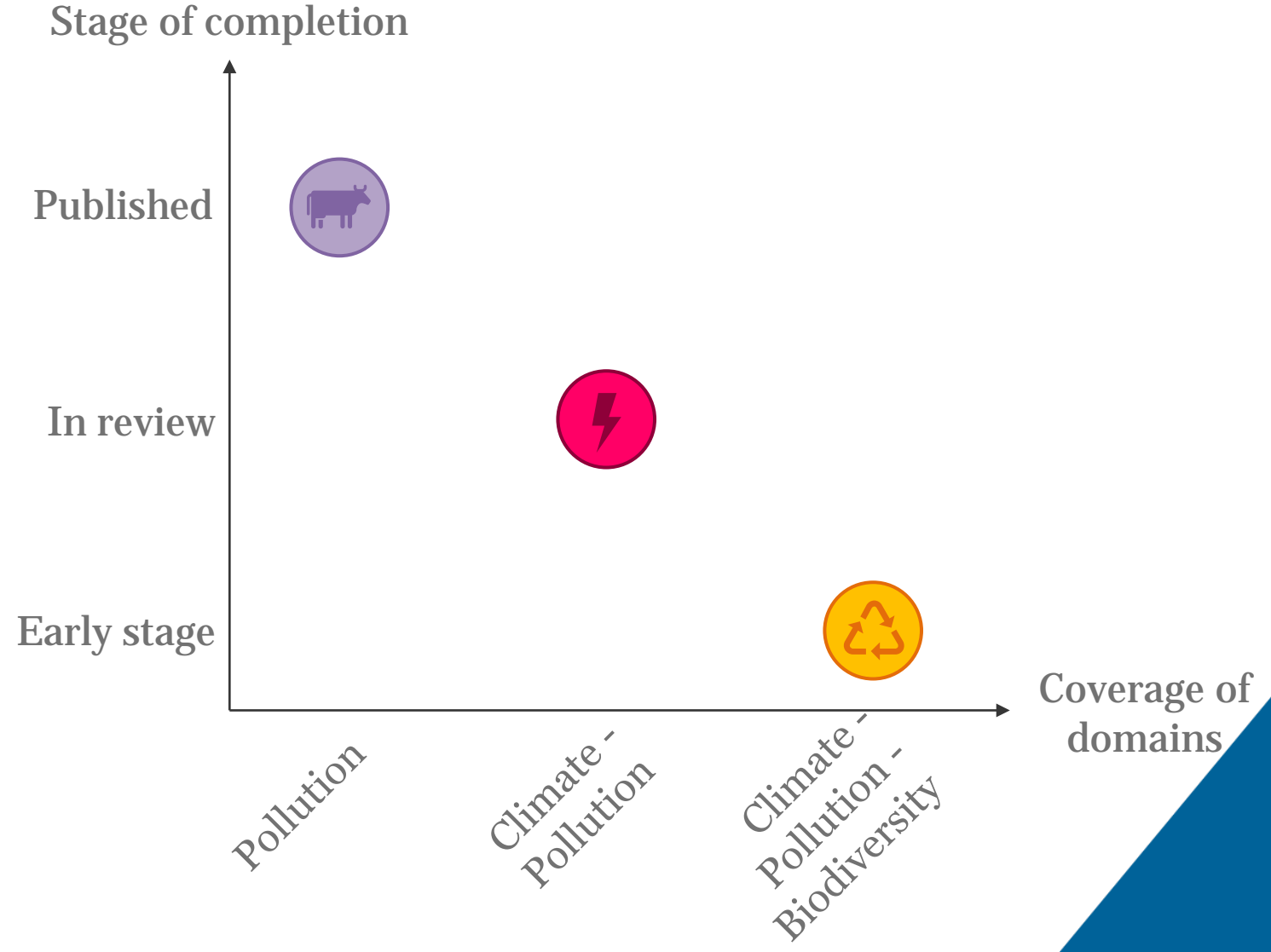


# Outline of this presentation

 The global and regional air quality impacts of dietary change

 Minimum energy taxes for climate and clean air in the EU

 The OECD Environmental Outlook





# Global & regional air quality impacts of dietary change

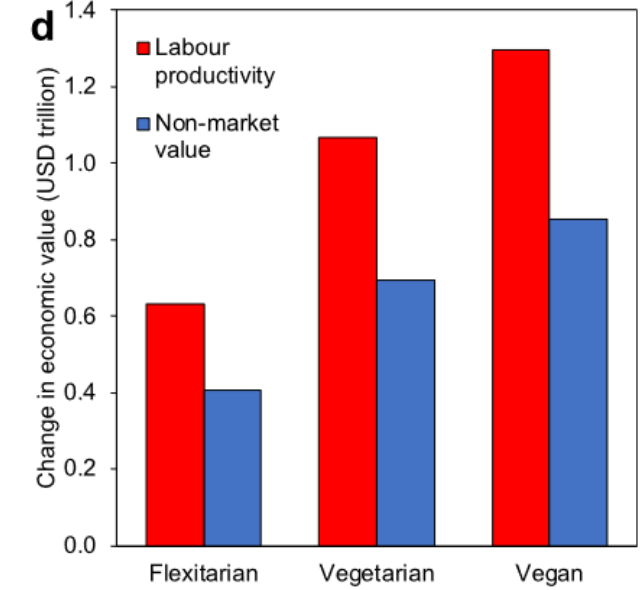
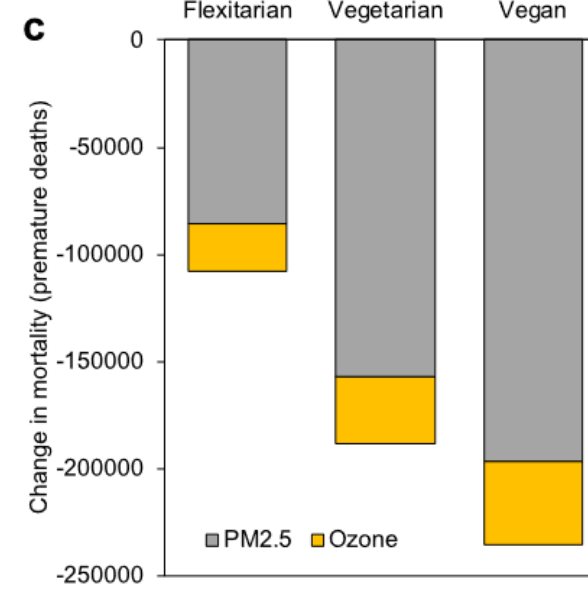
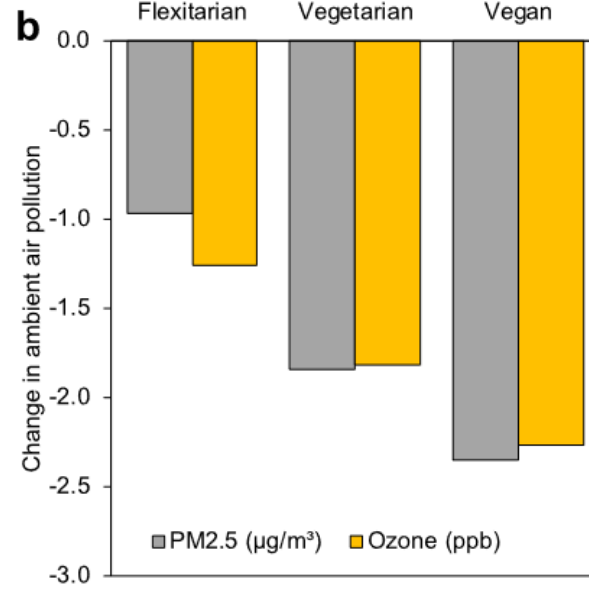
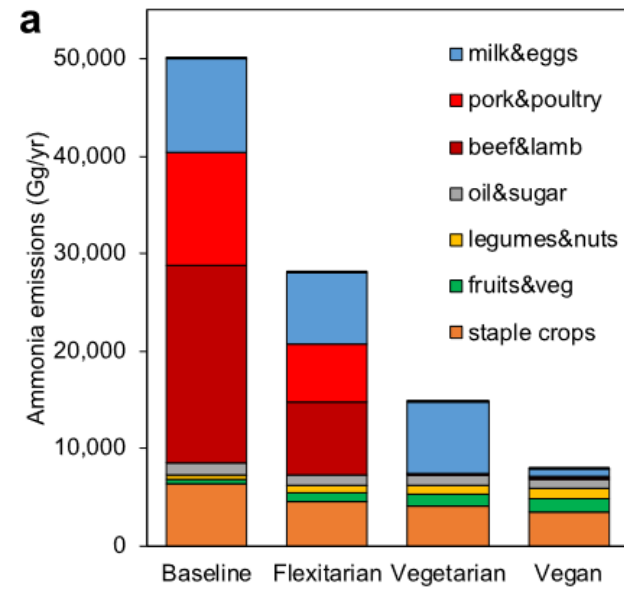


## NH3 emissions

## PM2.5 & O3 concentrations

## Health impact

## Economic impact

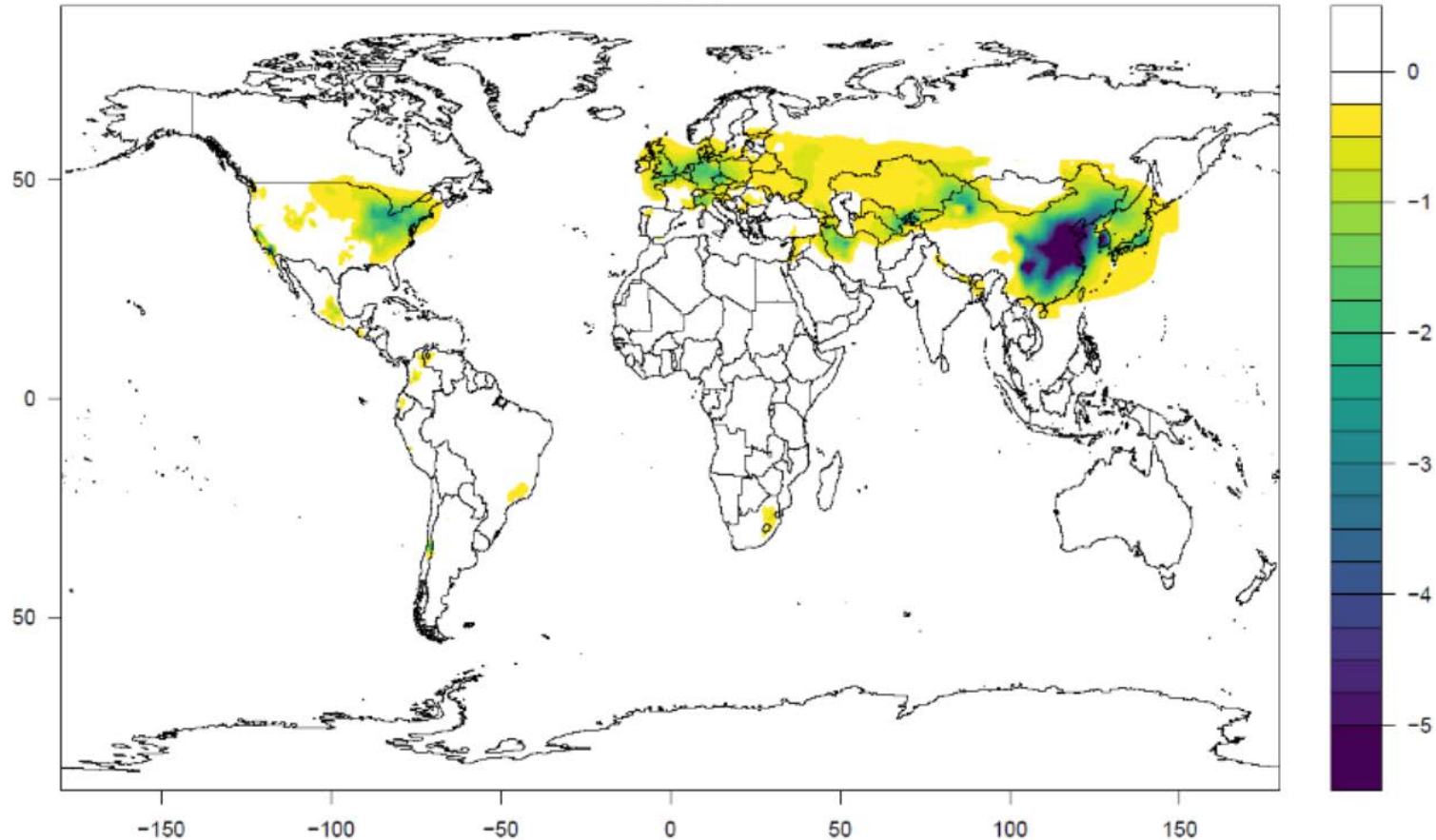




# Global & regional air quality impacts of dietary change

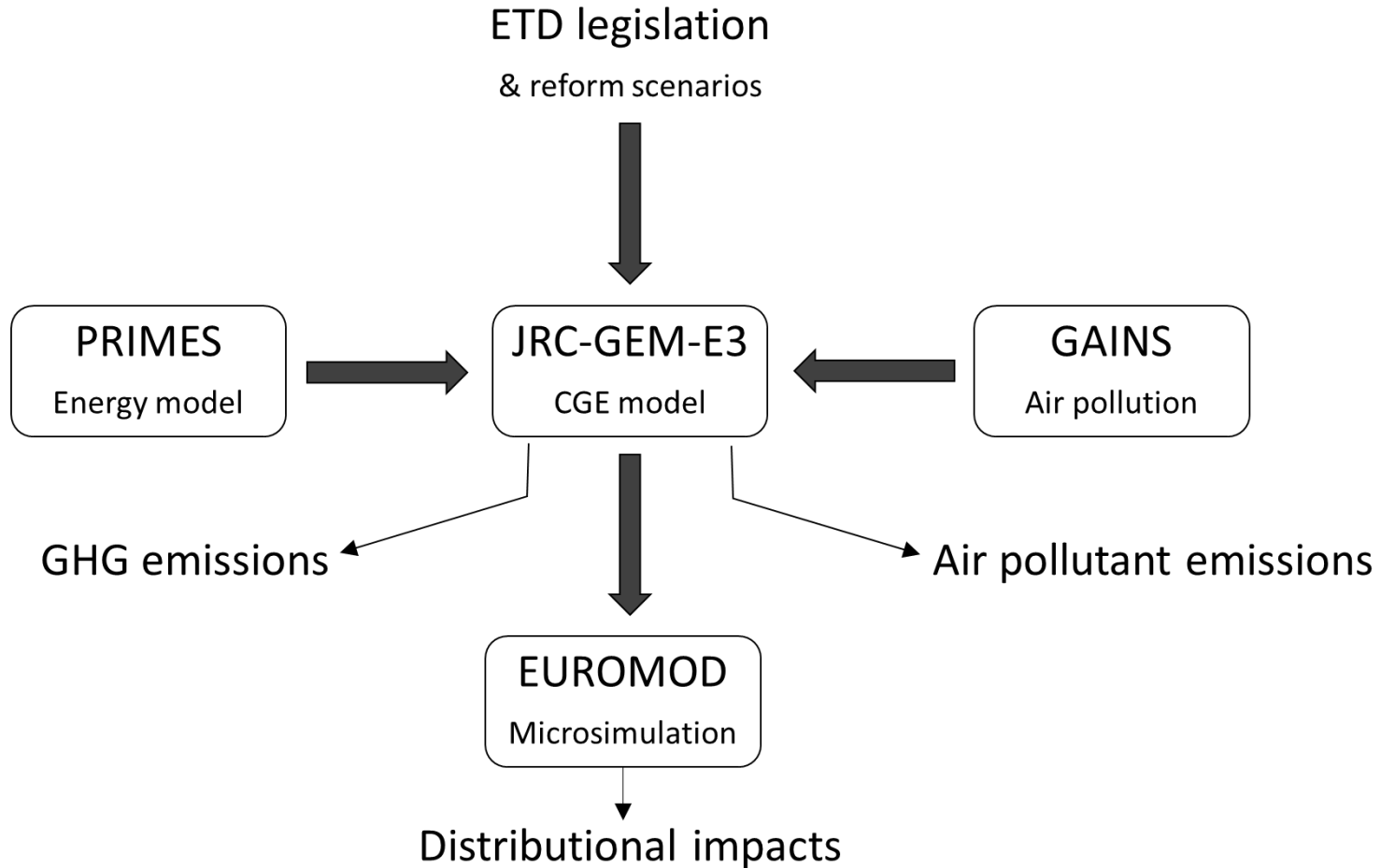


PM2.5 concentration change, Flexitarian, 2030





# Minimum energy taxes for climate & clean air in the EU



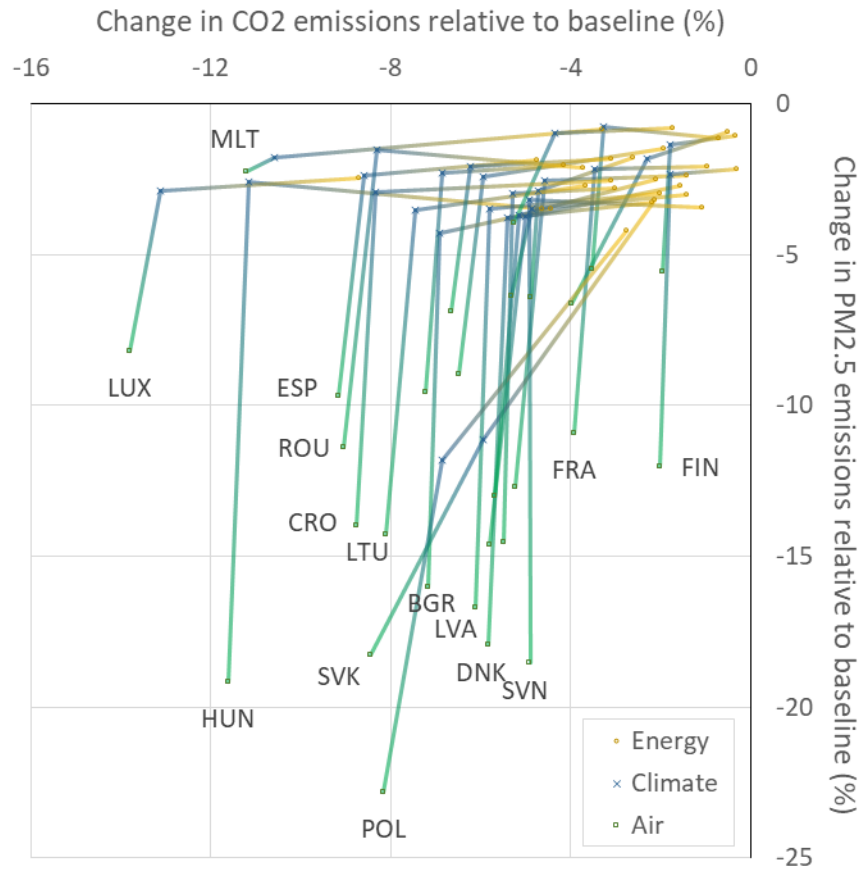


# Minimum energy taxes for climate & clean air in the EU

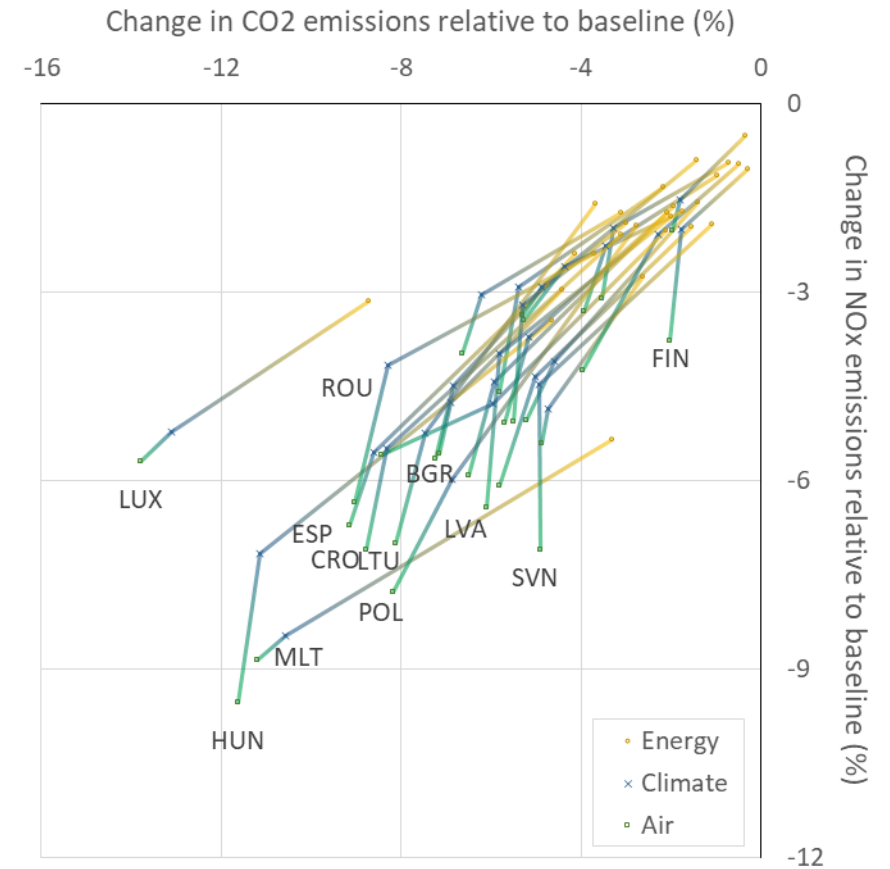


## Environmental co-benefits

### CO2 ~ PM2.5



### CO2 ~ NOx



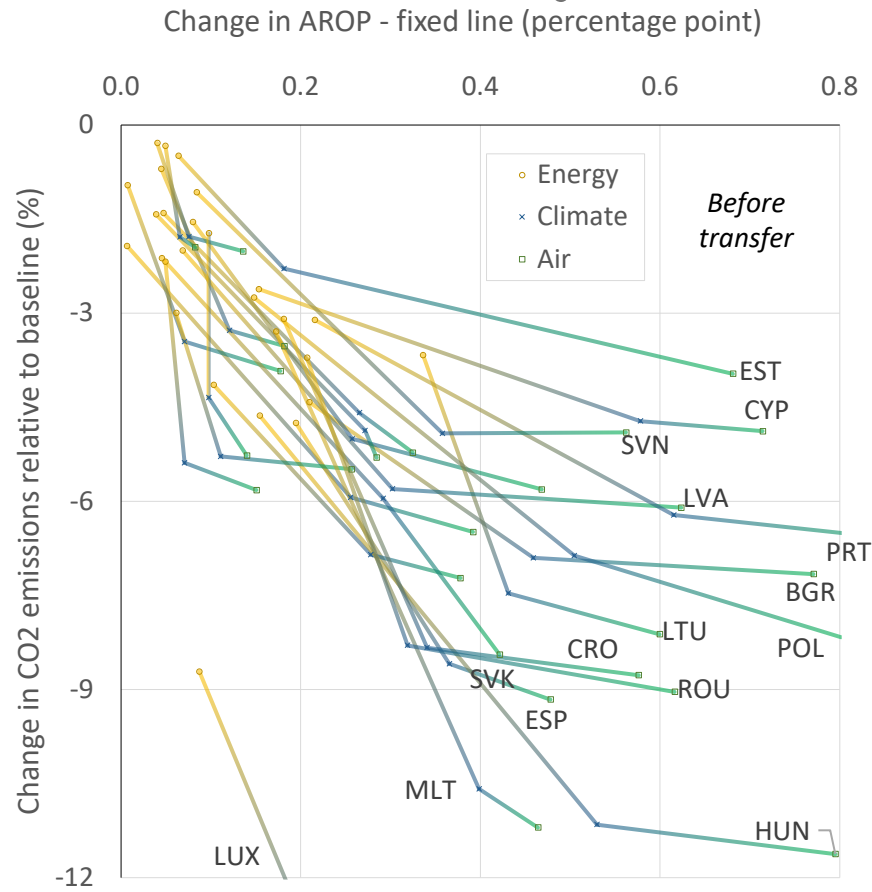


# Minimum energy taxes for climate & clean air in the EU



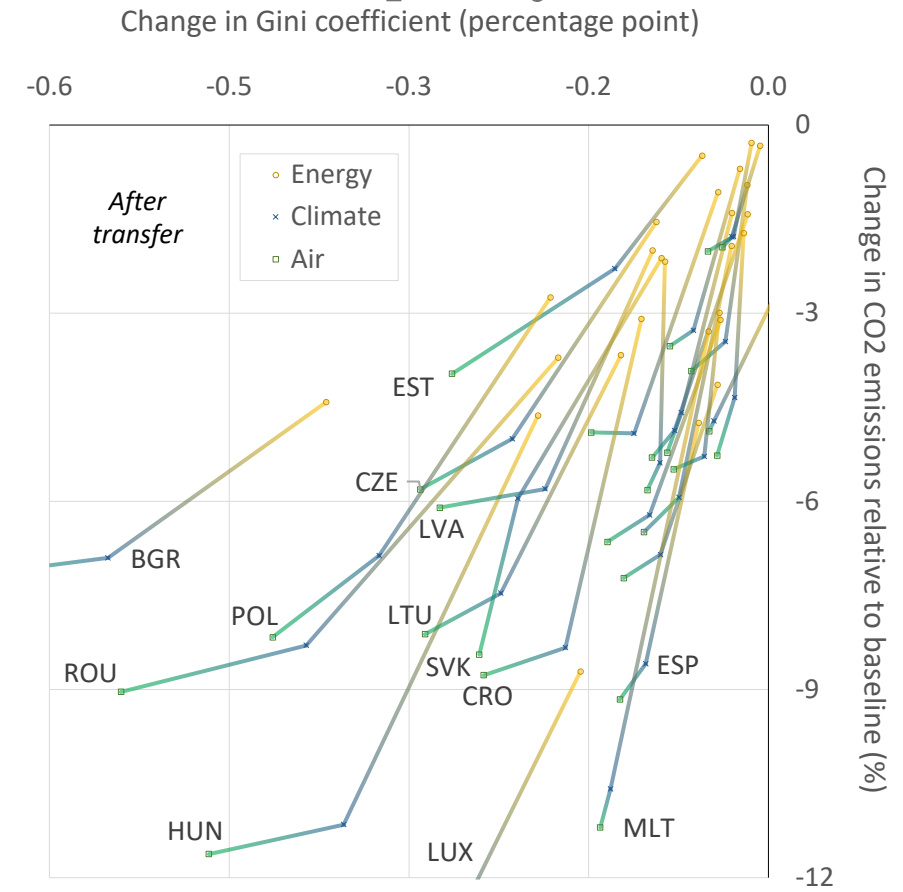
## Social trade-offs?

### Poverty



Before transfer of revenues

### Inequality

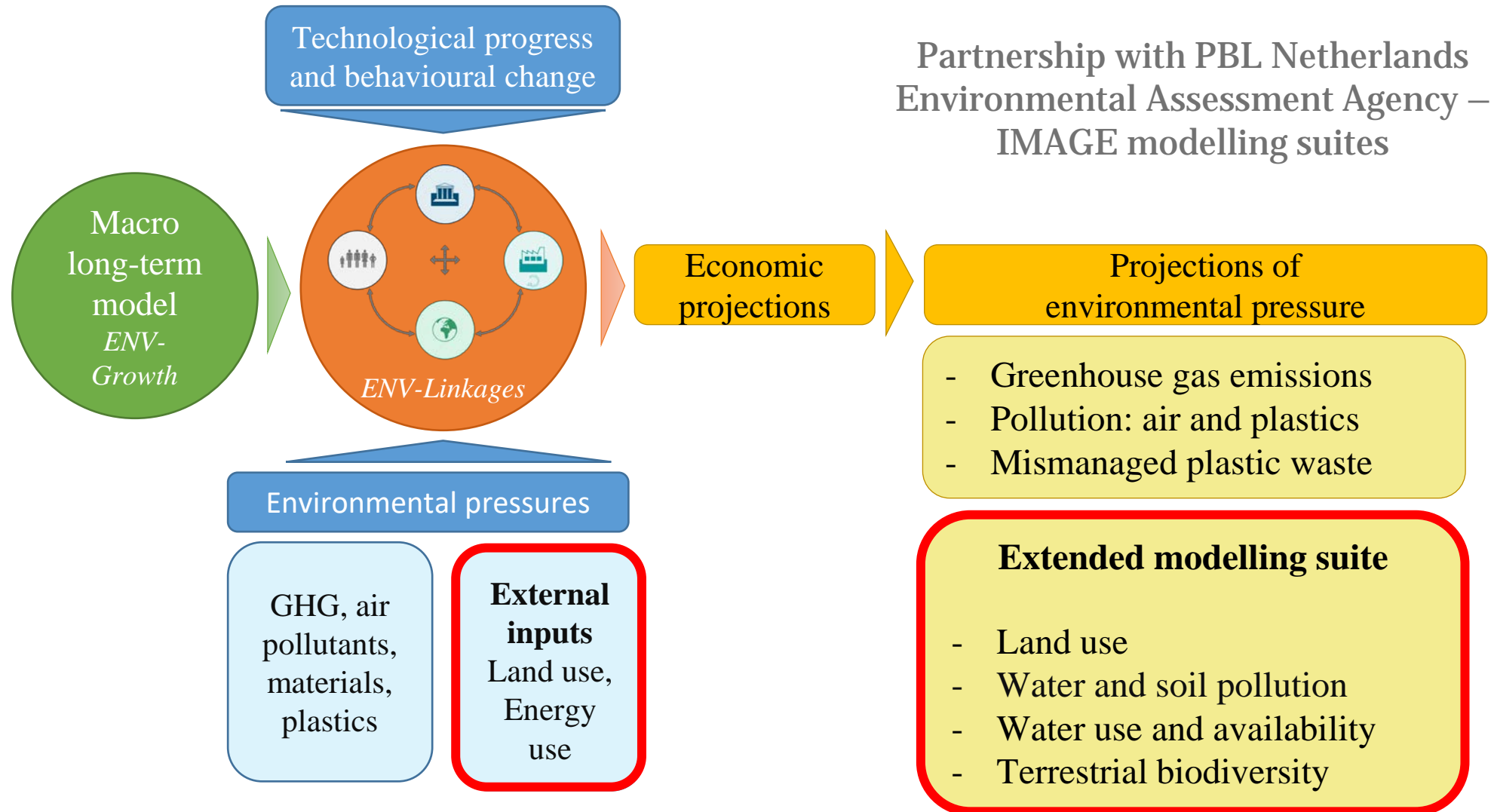


After transfer of revenues





# The OECD Environmental Outlook





# The OECD Environmental Outlook: Expert workshop



- Introduction
  - The triple planetary crisis context and research gaps
  - Framing the triple planetary crisis: impact, economic, and policy interlinkages
- Session 1. Modelling impact pathways and interactions
- Session 2. Modelling thematic policy action and spillovers
- Session 3. Modelling integrated policies for the triple planetary crisis





# THANK YOU

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