



RésEAU Webinars – 2018

Webinar 1:

The costs of inaction: how to make the case for reform

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A LONG-TERM OUTLOOK ON ECONOMY - ENVIRONMENT INTERACTIONS

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The OECD CIRCLE project

**CIRCLE: Costs of Inaction and Resource scarcity:
Consequences for Long-term Economic growth**

→ Calculating the costs of inaction:

- Quantify how changes in environmental quality, climate change, natural resources affect the economy, and prospects for long-term growth

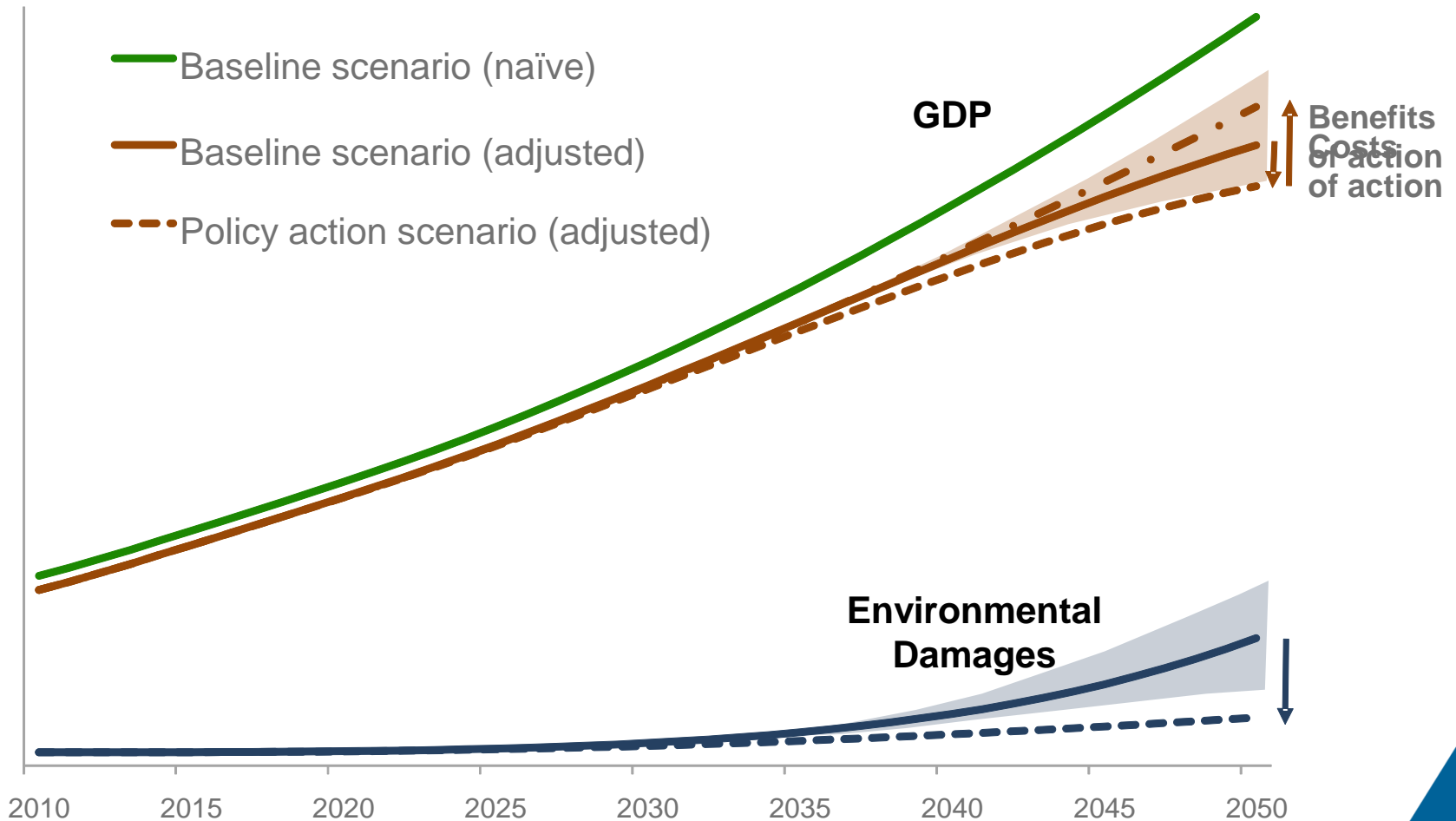
→ Regional and sectoral quantitative approach where possible, coupled with more general insights where needed

- Market impacts: production function approach
- Non-market impacts: valuation approach



From naïve to integrated growth projections

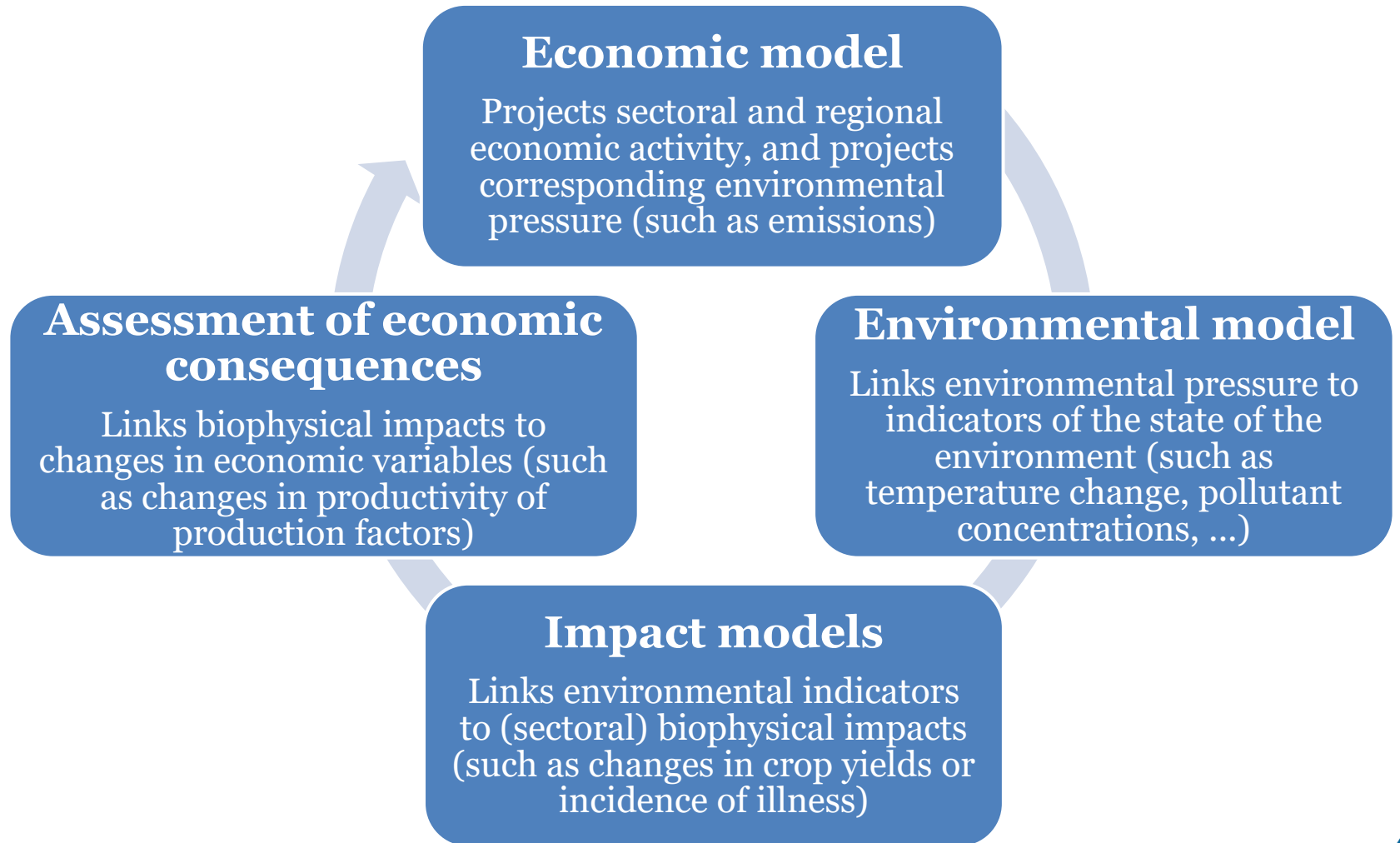
OECD countries asked for a methodology to create growth projections that take into account environmental impacts, to use as a reference and to motivate policy action



Note: For illustrative purposes only



CIRCLE methodology








**The Economic Consequences
of Climate Change**



**The Economic Consequences
of Outdoor Air Pollution**



**The Land-Water-Energy
Nexus**
Biophysical and Economic Consequences



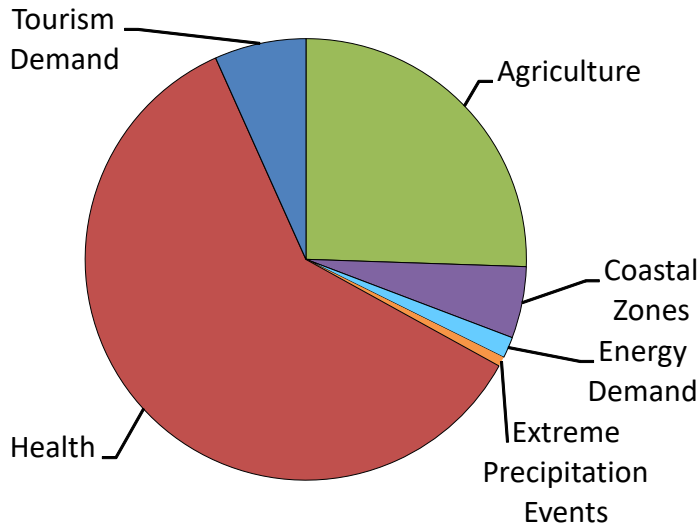


Global importance of different impacts

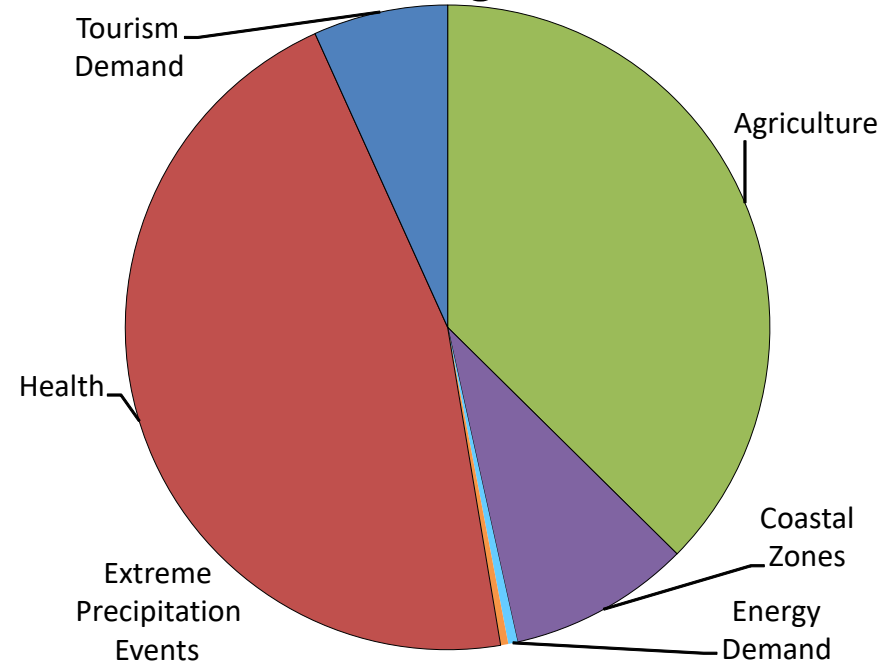


OECD

Global damages 2035



Global damages 2060



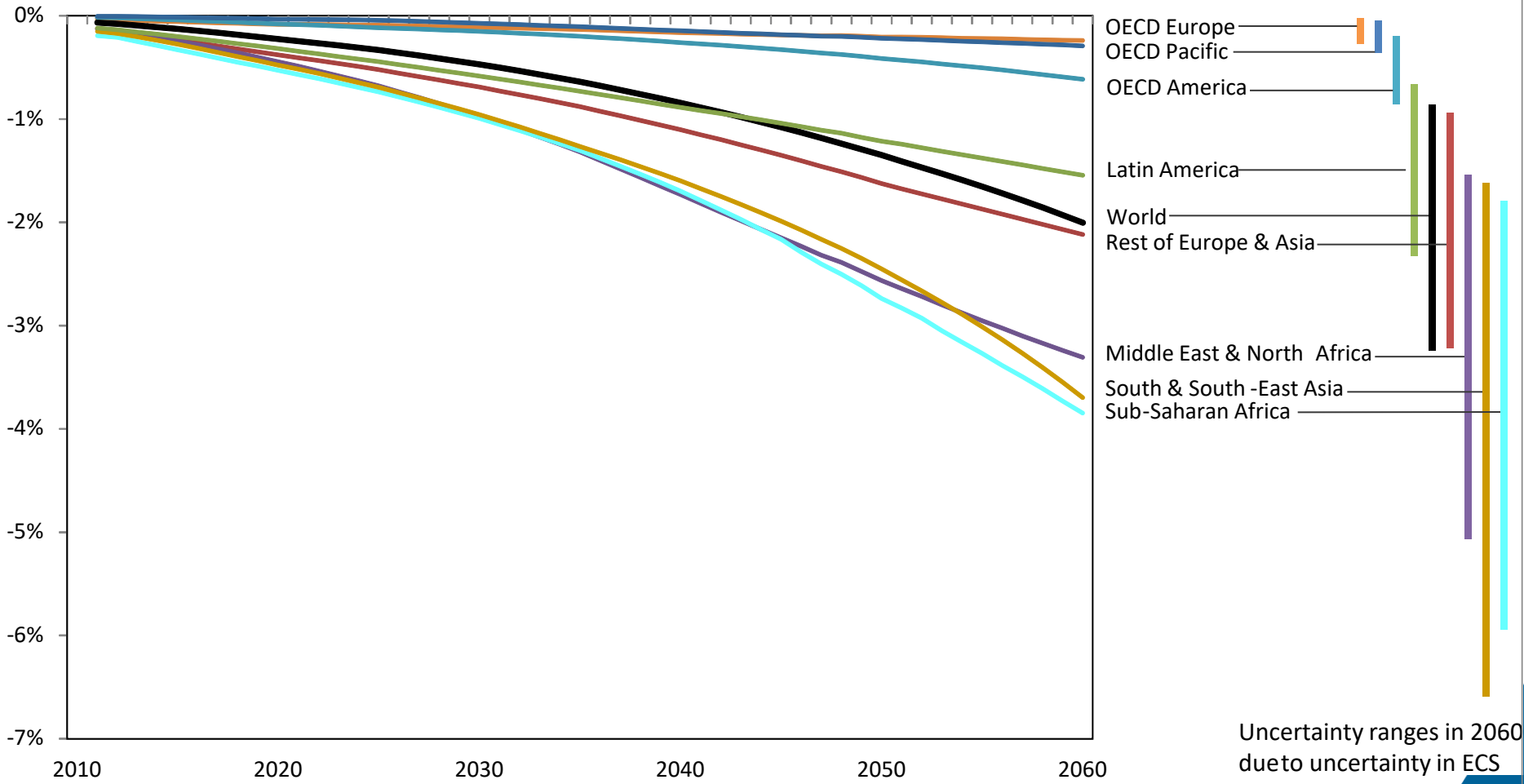
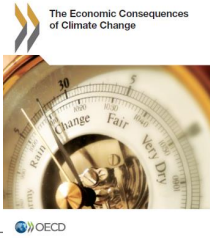
Global GDP loss:

2035: 0.3-1.0%

2060: 1.0-3.3%



Regional cost of selected climate impacts

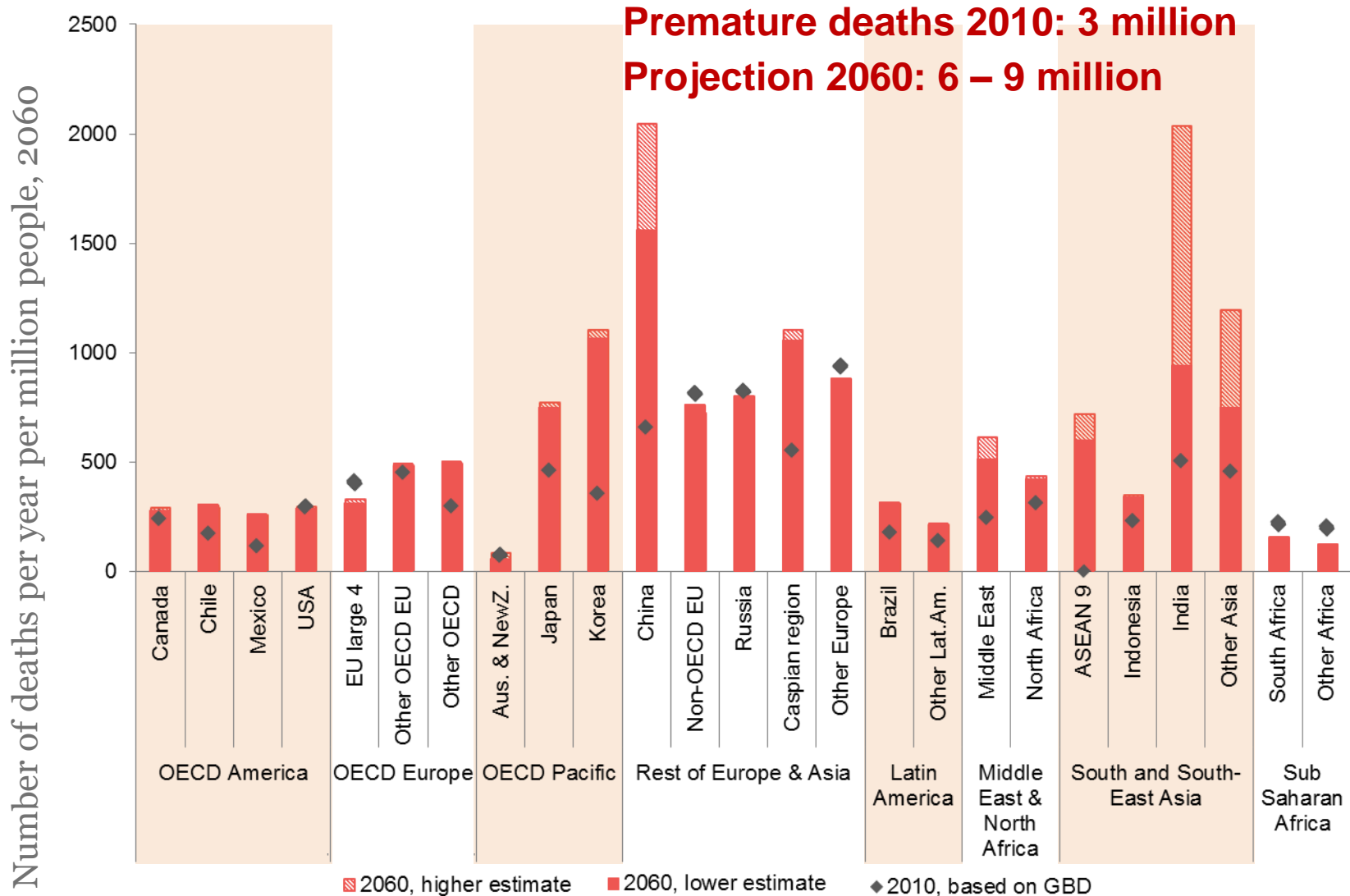




Premature deaths caused by outdoor air pollution



OECD

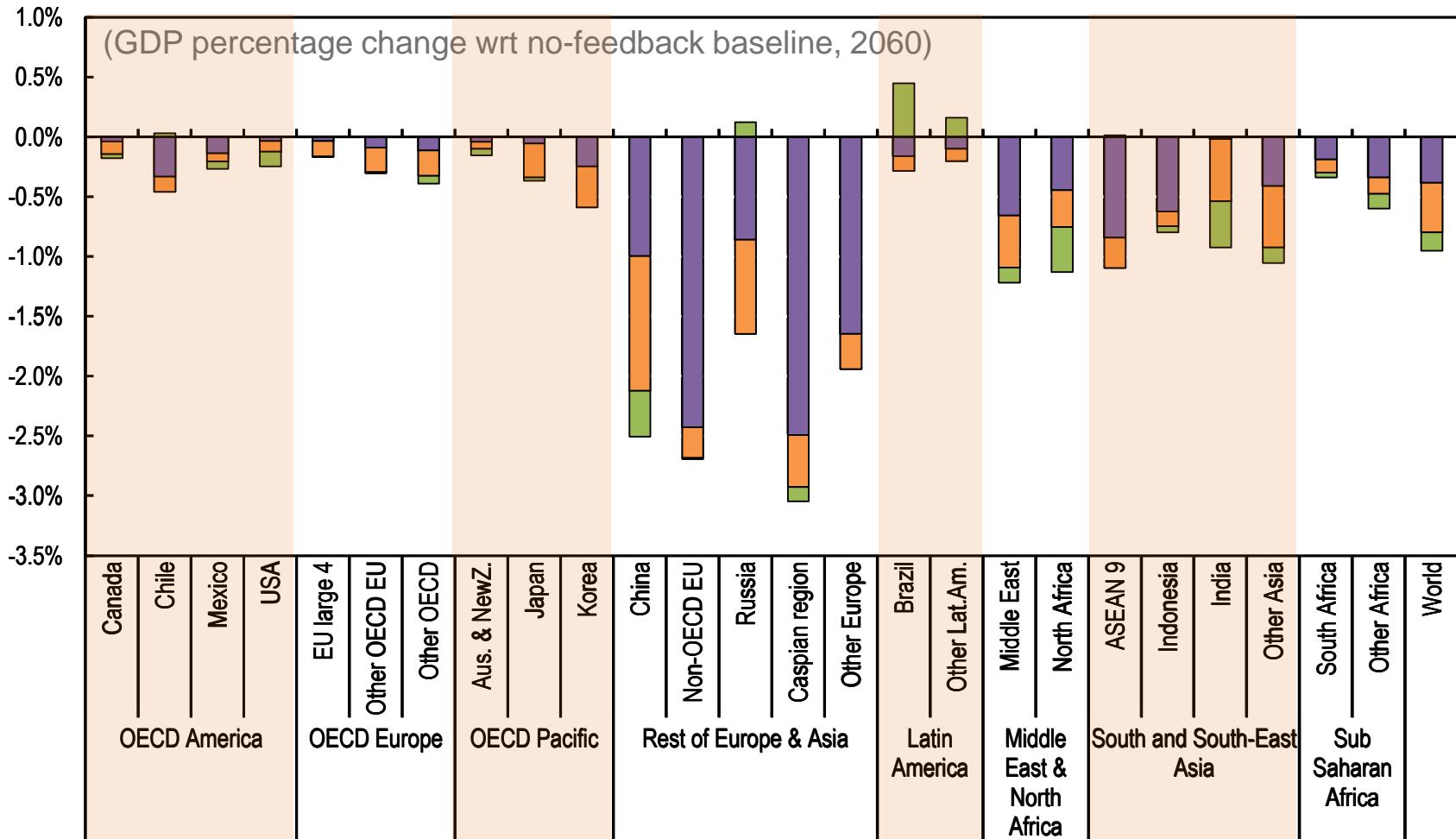


Source: OECD (2016), The Economic Consequences of Outdoor Air Pollution



Projected market costs of outdoor air pollution, 2060

■ Agriculture
 ■ Labour productivity
 ■ Health Expenditures

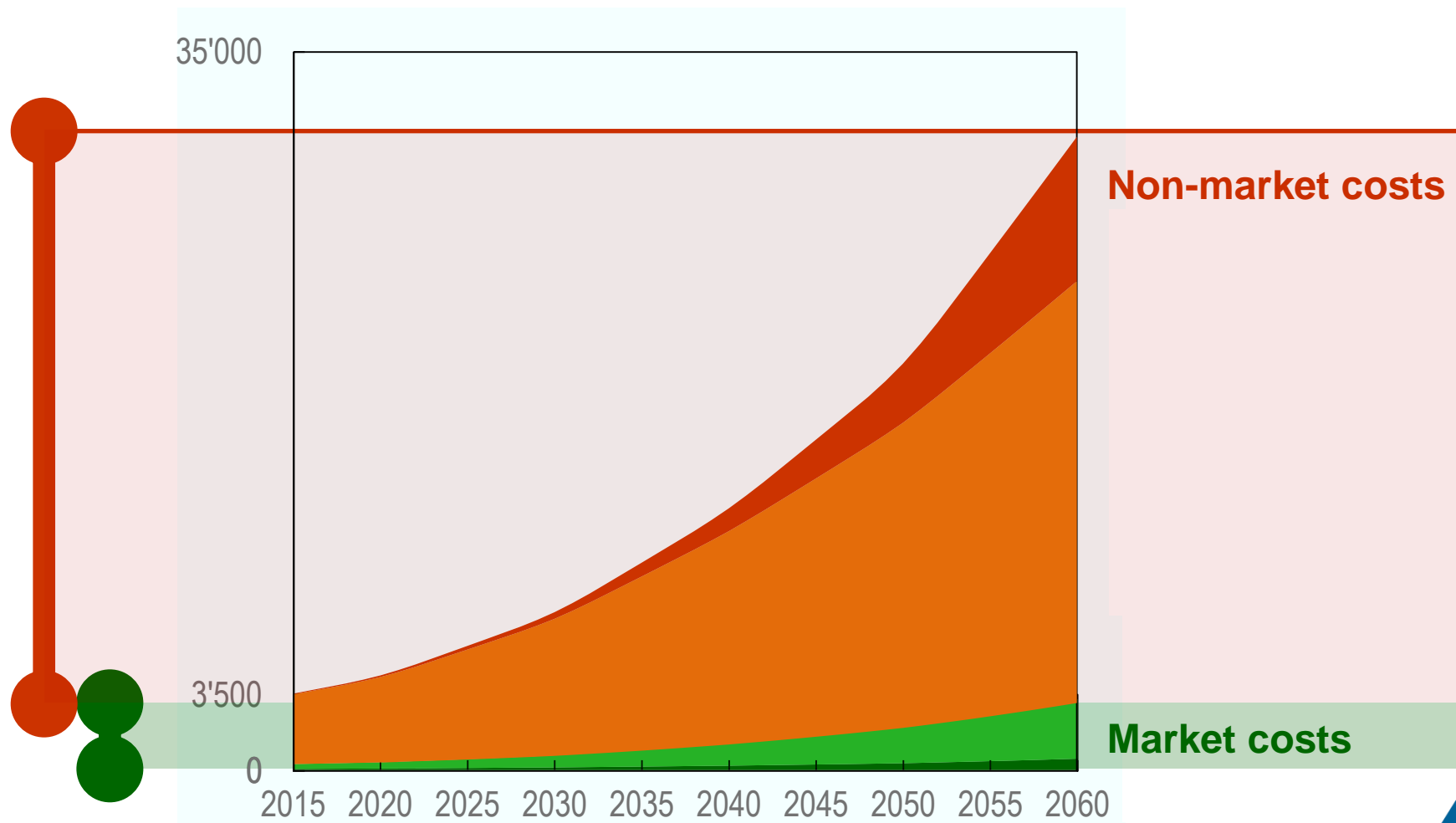


Source: OECD (2016), The Economic Consequences of Outdoor Air Pollution



Market and non-market costs

Billions of USD, 2010 PPP exchange rates



Source: OECD (2016), The Economic Consequences of Outdoor Air Pollution



Challenges and implications of the OECD CIRCLE project



Challenges of CIRCLE project

- Data sources at global level
- Matching local environmental issues with larger scale economic indicators
 - E.g. air pollution concentrations at local level, but GDP at the national/regional level
- Presenting market and non-market impacts
- Missing impacts and data
 - Some impacts could not be quantified and were discussed qualitatively



Impacts and implications of CIRCLE project

- Diffusion of results in media and academia
 - Raised awareness
 - Raised interest in the topics
- Applications of CIRCLE approach by country
- Interest in continued work
 - Current project on resource use and the circular economy
 - Future project on benefits of policy action

BUT too early to assess policy changes



THANK YOU!

For more information:

www.oecd.org/environment/outlooks

www.oecd.org/environment/modelling

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