Barriers to and opportunities for the consideration of health co-benefits in the development of climate change mitigation policies

Workshop on human health, global environmental change and transformative action: The case for health co-benefits
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Annabelle Workman
PhD candidate, Australian-German Climate and Energy College, School of Earth Sciences, the University of Melbourne

Roadmap

1. Context
2. Methods
3. Findings

Why Health?

Impact of climate change on lives lost and ill health in OECD countries, China and India:

$3.5 trillion annually

Costs of childhood asthma, childhood cancer, childhood lead exposures, and childhood neurobehavioral disorders associated with environmental exposures, in California:

$254 million every year

2015 World Environmental Health Day:
The Call to Protect Children's Environment and Health
ourhealthandenvironment.wordpress.com

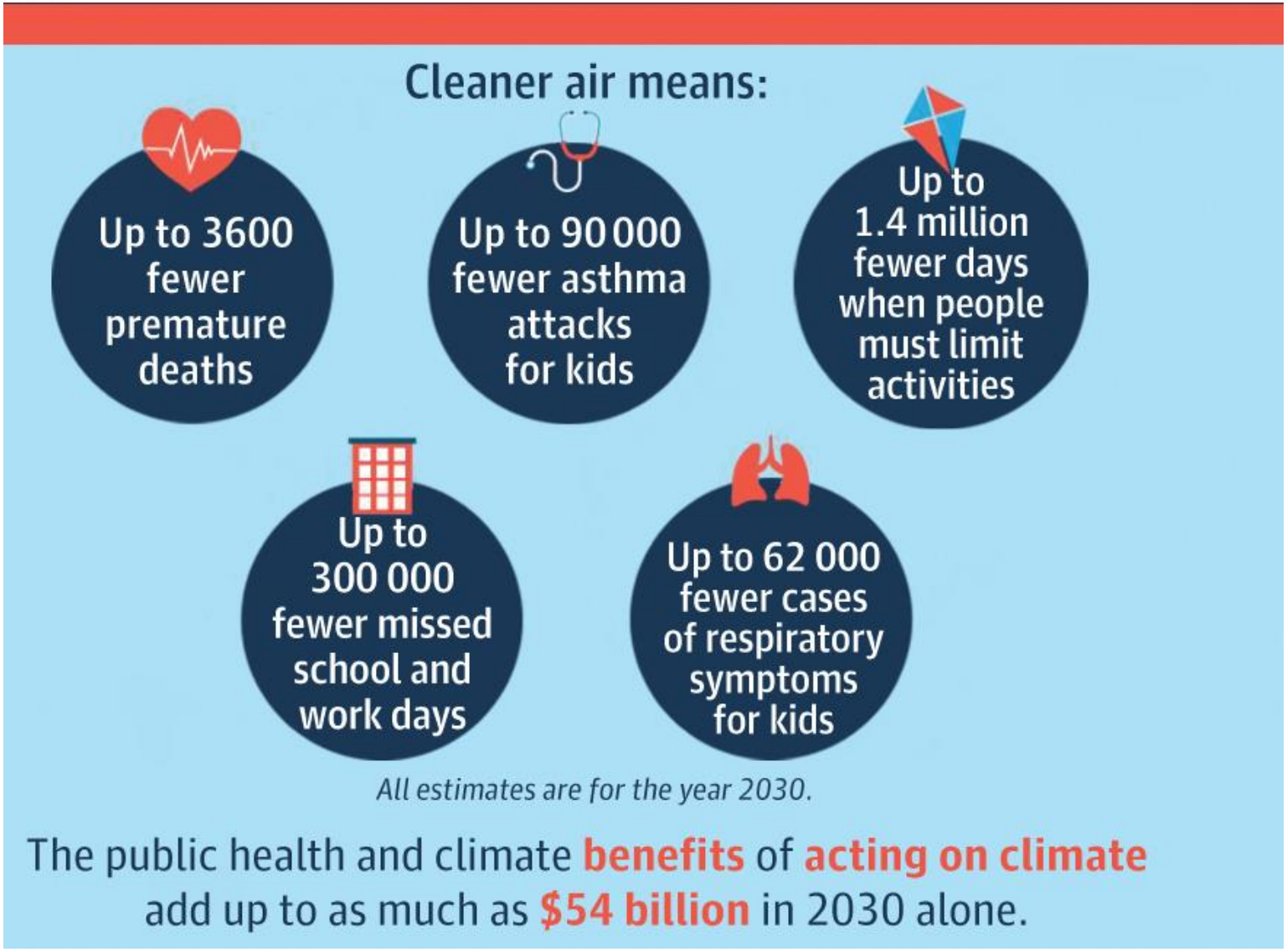
Perera, F. (2015), *On World Environmental Health Day: The Call to Protect Children's Environment and Health*, the Collaborative on Health and Environment, < https://ourhealthandenvironment.wordpress.com/2015/09/26/on-world-environmental-health-day-the-call-to-protect-childrens-environment-and-health/>.

Health Co-Benefits

Health outcome	Estimated time lag for health co-benefits
Reductions in sudden cardiac death due to reduced air pollution	Days to weeks
Reduction in acute respiratory infections in children due to reduced air pollution	Weeks to months
Reduction in chronic obstructive pulmonary disease (COPD) exacerbations	Weeks to months
Reduction in COPD prevalence due to reduced air pollution	Years

Remais J.V., Hess J.J., Ebi K.L., Markandya A., Balbus J.M., Wilkinson P., et al. (2014), Estimating the Health Effects of Greenhouse Gas Mitigation Strategies: Addressing Parametric, Model, and Valuation Challenges. *Environmental Health Perspectives,*122(5):447–55.

Health Co-Benefits



Jacob, J.A. (2015), EPA releases final Clean Power Plan, *Journal of American Medical Association,* 314(12): 1216.

Health Co-Benefits: Traction?

"Though an extensive and growing literature suggests that the ancillary benefits of climate mitigation policies are large, the policy impact of the co-benefits concept has been limited."

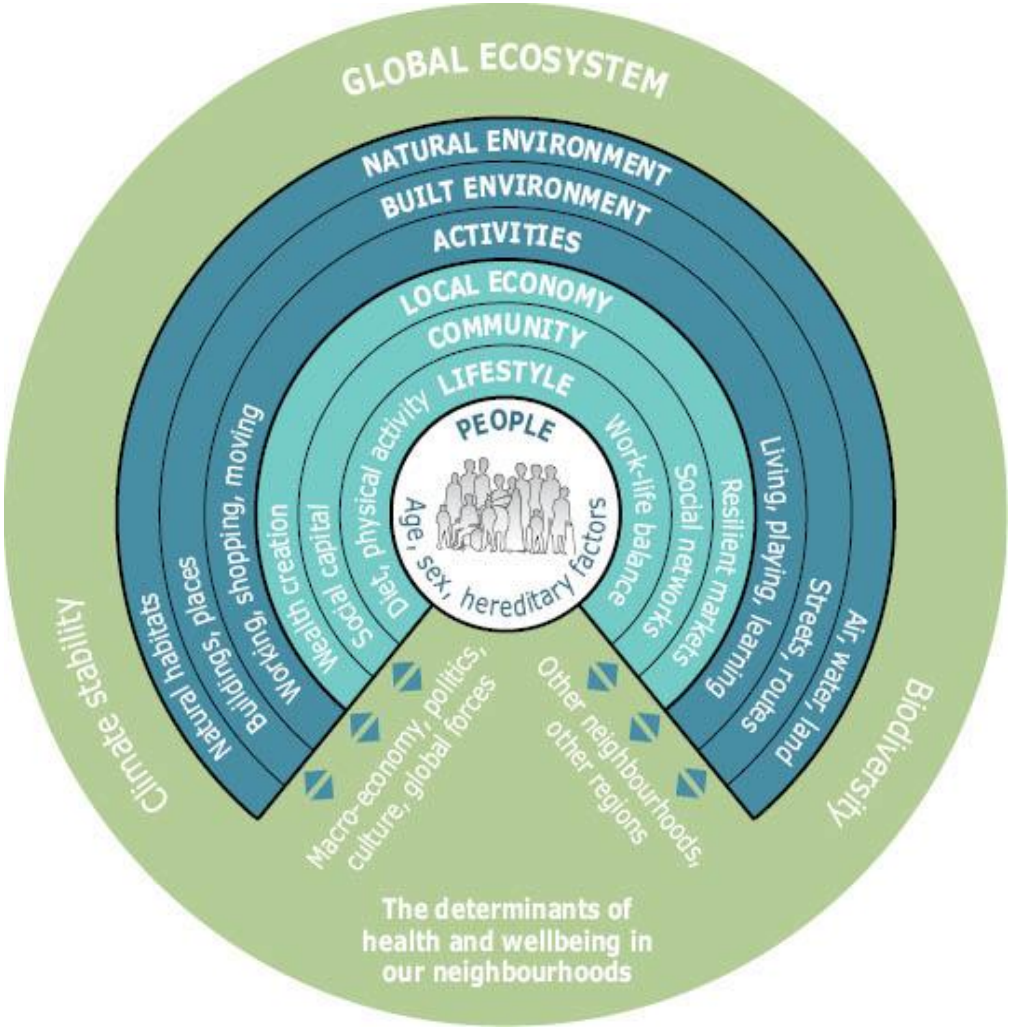
Jack D.W. and Kinney P.L. (2010), Health co-benefits of climate mitigation in urban areas, *Curr Opin Environ Sustain,* 2010;2:172–7.

Research Questions

1. Are health co-benefits considered and accounted for in the development of climate change mitigation policies and if so, how?

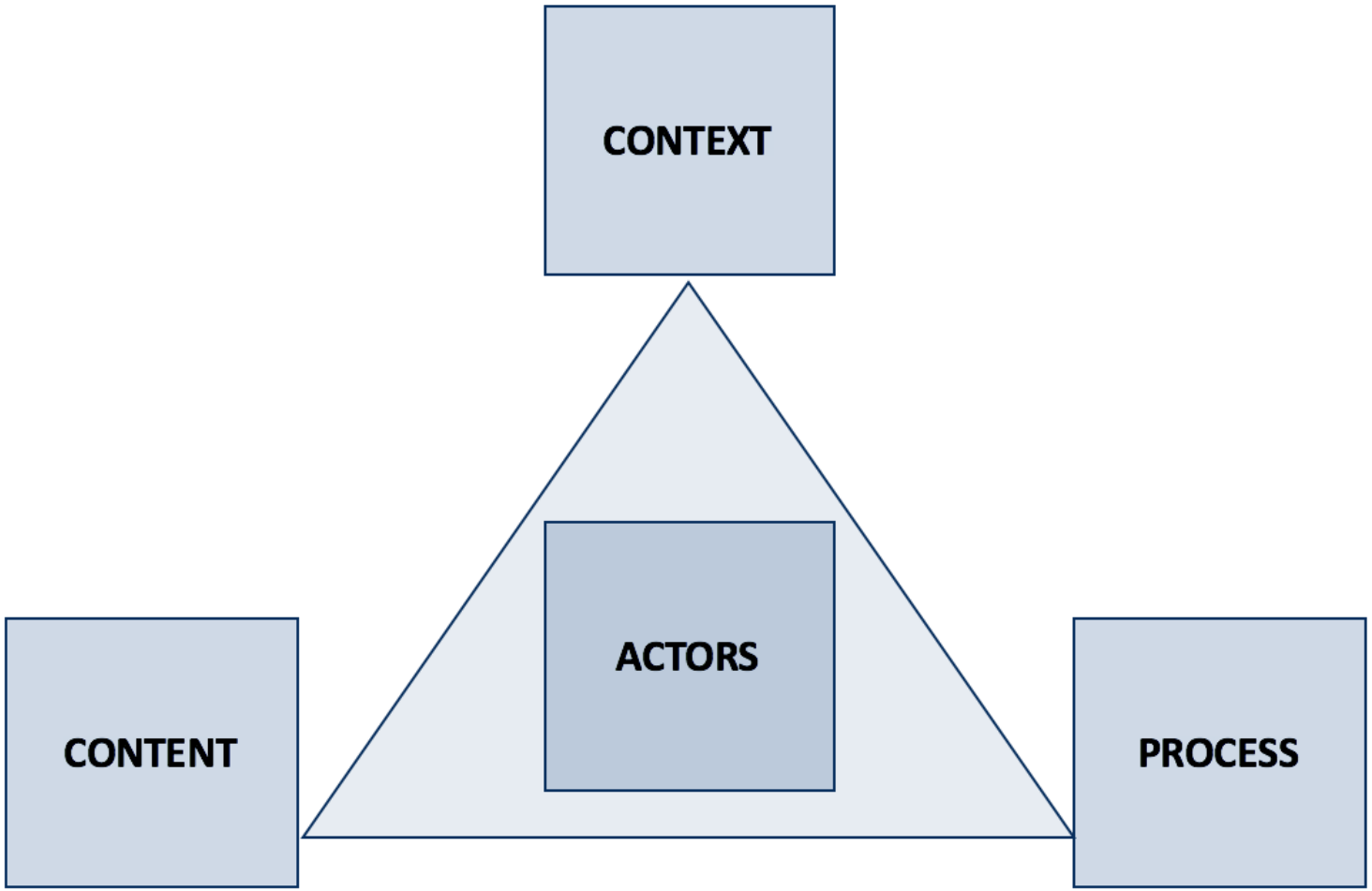
2. What factors influence whether health co-benefits are considered and accounted for?

Theoretical Framework



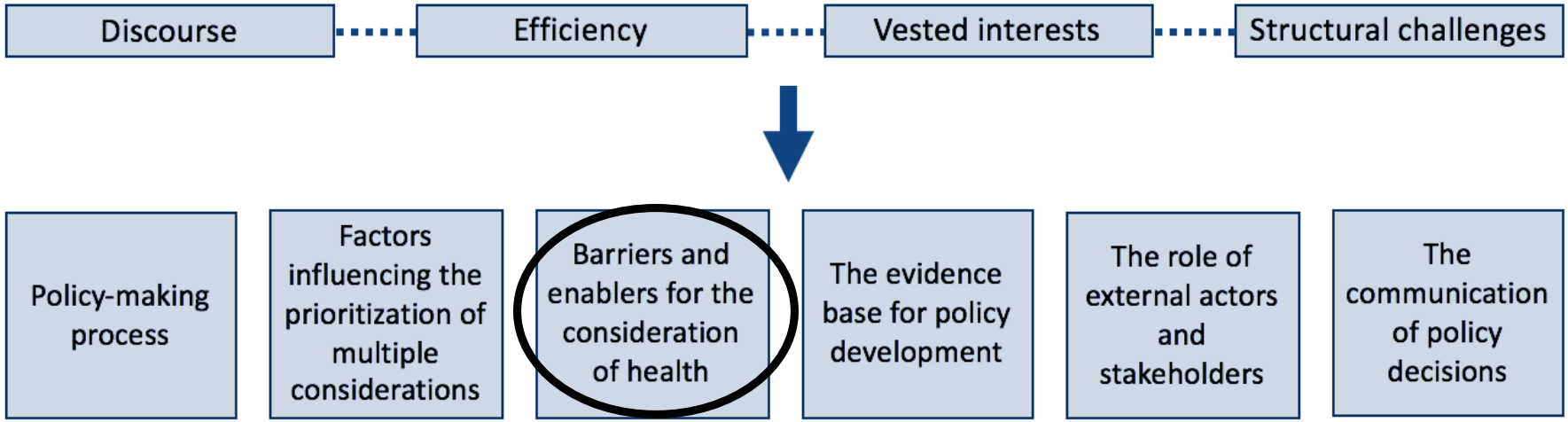
Barton, H. and Grant, M. (2006), A health map for the local human habitat, *Journal for the Royal Society for the Promotion of Health*, 126(6), 252-253.

Analytical Framework



Walt, G. and Gilson, L. (1994), Reforming the health sector in developing countries: the central role of policy analysis, *Health Policy and Planning*, 9(4): 353-370

Interrelated Areas and Themes



Findings: Australia vs. EU

Australia: *"to the extent things like health were factored in, it…wasn't a particularly strong factor and it certainly wasn't…a consideration that was unpacked in a very detailed and systematic way…"*

EU: *"Member States that have to implement these measures, they don't look at the positive side. They only look at the cost. They have a very conservative view on this."*

Overarching Finding

- **Australia**: health co-benefits considered qualitatively, minimal role in determining final policies
  - Driver: Upfront costs

- **EU**: health co-benefits quantified and monetized, but limited influence on final policies
  - Drivers: Upfront costs and energy security
  - Health a driver of air pollution mitigation

Findings: Barriers

Barriers	Australia	EU
Limited role of health ministry in the policy development process	✓	✓
Limited funding for climate change and health research	✓	✓
Decoupling of GHG and non-GHG emissions during policy development	✓	✓
Lack of local robust data for inclusion in co-benefits studies	✓	✗
Health perceived as relevant primarily to adaptation measures	✓	✗
Influential role of vested interests in the policy development process	✓	~

Findings: Enablers

Enablers	Australia	EU
Historic weather events with significant health implications	✓	✓
Transparency and accountability mechanisms of the policy-making process	✗	✓
Well-established and increasingly ambitious air quality policies based on direct health impacts	✗	✓

Opportunities?

- Embed climate change mitigation in the health agenda
  - Appoint health champions within and external to government across sectors
- Establish coalition between health and renewable energy sector
  - explicitly link health and energy security
- Integrated approach to climate change and air pollution mitigation policies?

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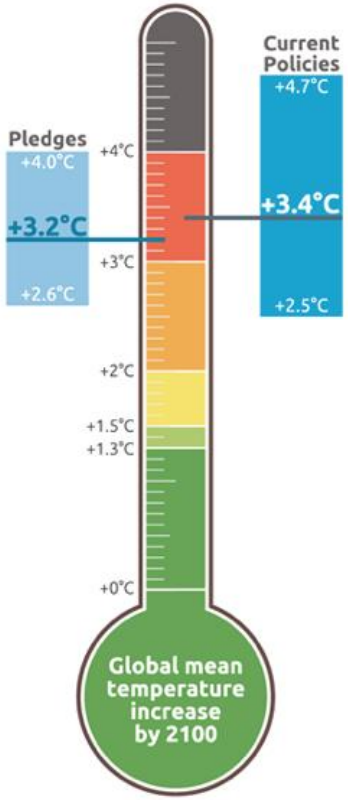
Motivation

"Achieving a decarbonized global economy and securing the public health benefits it offers is no longer primarily a technical or economic question – it is now a political one." Watts et al (2015)



Climate Action Tracker

CAT warming projections

Global temperature increase by 2100

November 2017 Update

2100 WARMING PROJECTIONS

	CURRENT POLICIES	PLEDGES
2016	3.6°C	2.84°C
2017	**3.4°C**	**3.16°C**
Change	-0.2°C	+0.32°C

Climate Action Tracker (2017), COP23 Briefing, <https://www.ecofys.com/en/publications/climate-action-tracker-cop23-briefing/>

Australia vs. EU

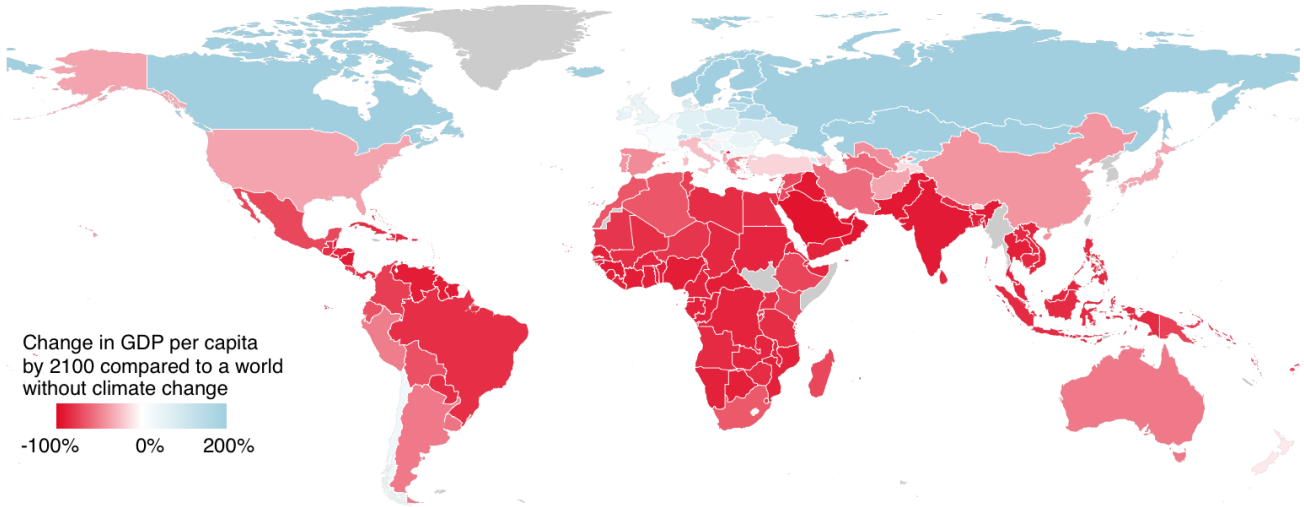
Australia

- Strong extractive industry - net exporter
- Politically toxic and partisan approach to climate action
- ~~Carbon pricing mechanism~~
- NDC:
- 26-28% below 2005 levels by 2030 (no 2050 target)

European Union

- Net energy importer
- Accountability and transparency mechanisms
- Strong public acceptance of climate action
- NDC:
- >40% below 1990 levels by 2030;
- 80-95% below 1990 levels by 2050

Implications



Burke, M., Hsiang, S.M., Miguel, E. (2015), Global non-linear effect of temperature on economic production, *Nature*, 527: 235-239