

A new approach to healthy urban design & planning

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What does a healthy building or neighbourhood look like in 2019?



**As a designer, planner, engineer...
how do I know if my project will
promote health?**

There are many existing standards and guidance documents...



Covering a range of topics...



Transport



Inclusion & Equity



Physical activity



Gender



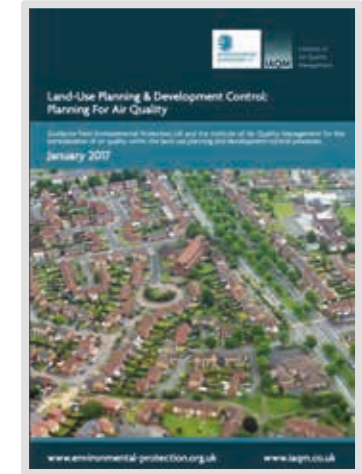
Streets



Ageing Population



Food



Air Quality

Yet we still often have a siloed design and planning response

REAL ESTATE

HEALTHCARE

TRANSPORT

BUILDING SERVICES

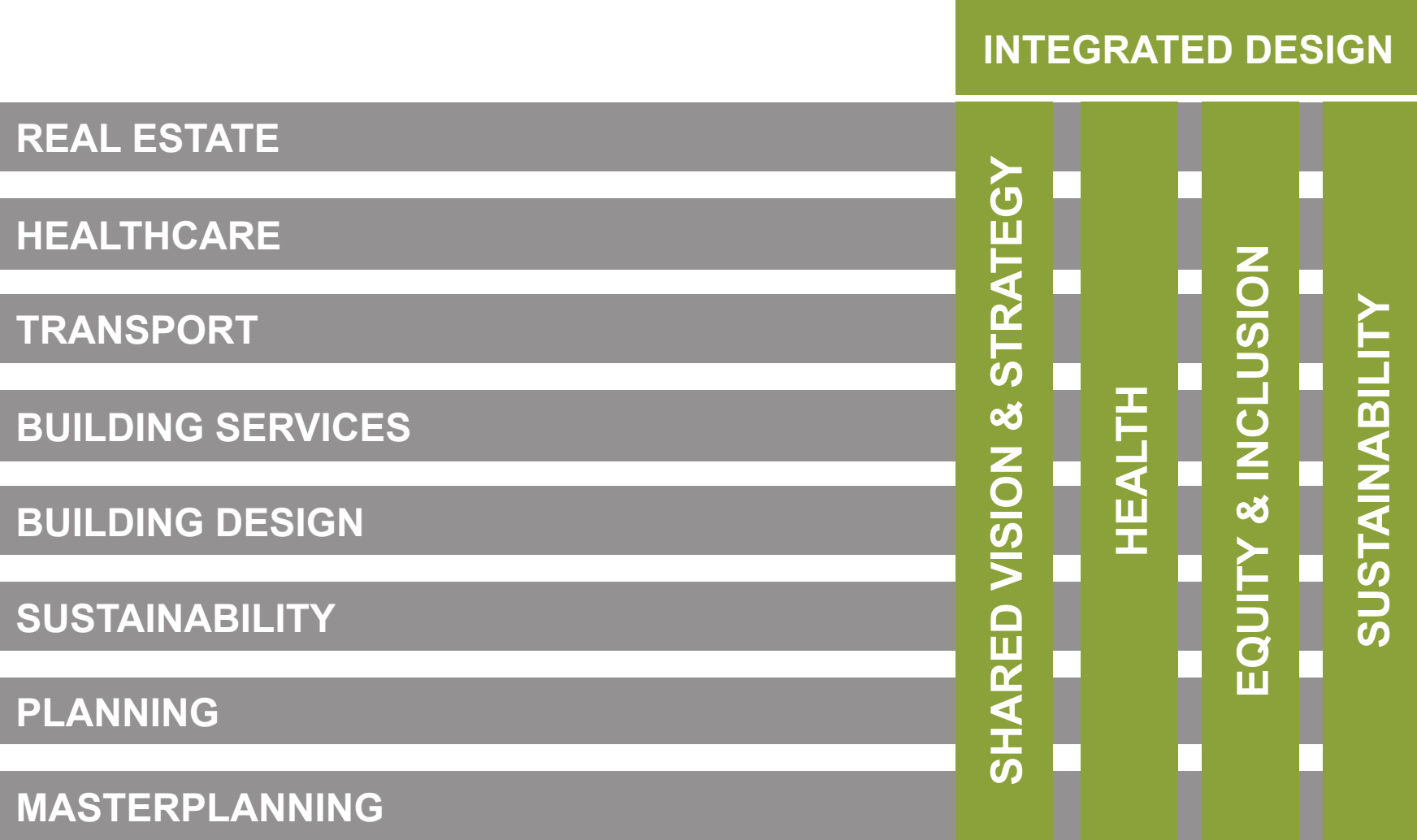
BUILDING DESIGN

SUSTAINABILITY

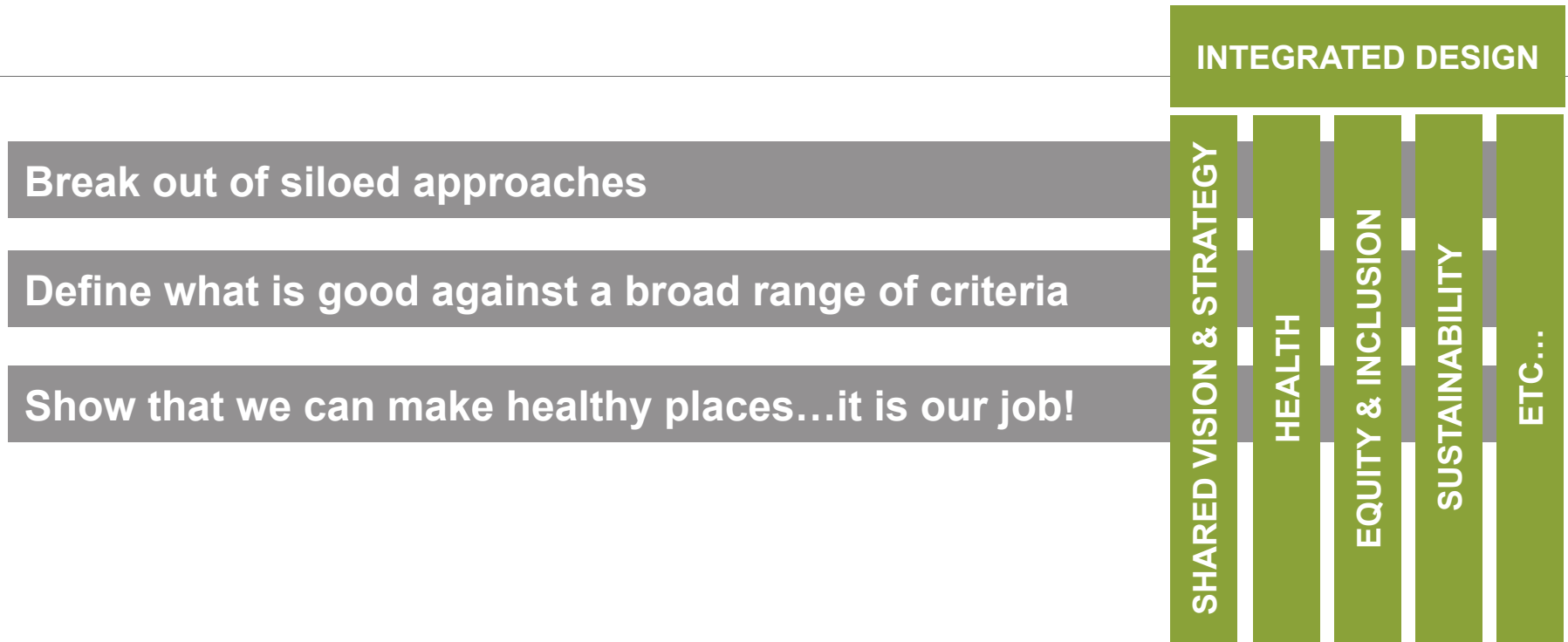
PLANNING

MASTERPLANNING

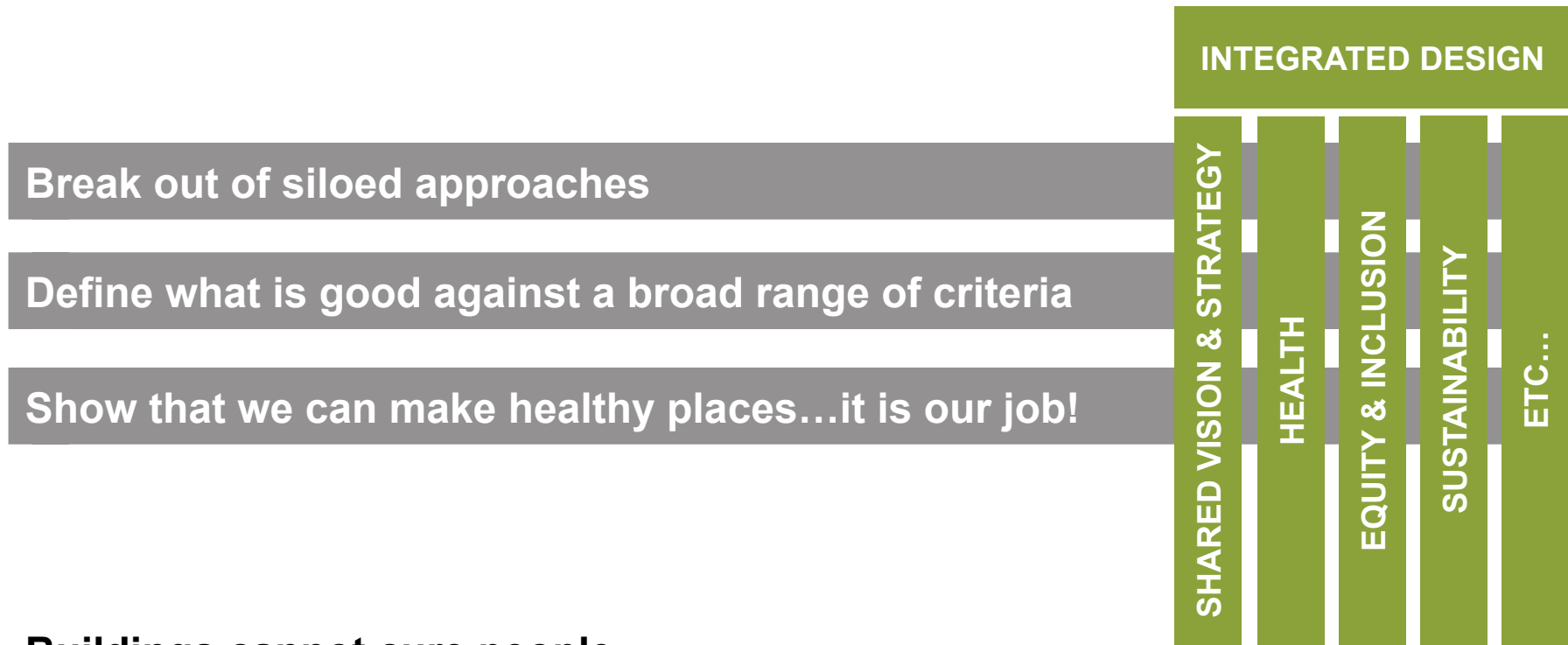
Yet we still often have a siloed design and planning response



Continued need for integrated design



Continued need for integrated design



Buildings cannot cure people.

Mirko Zardini*

There is no moral duty on architects to incorporate cures into their work.

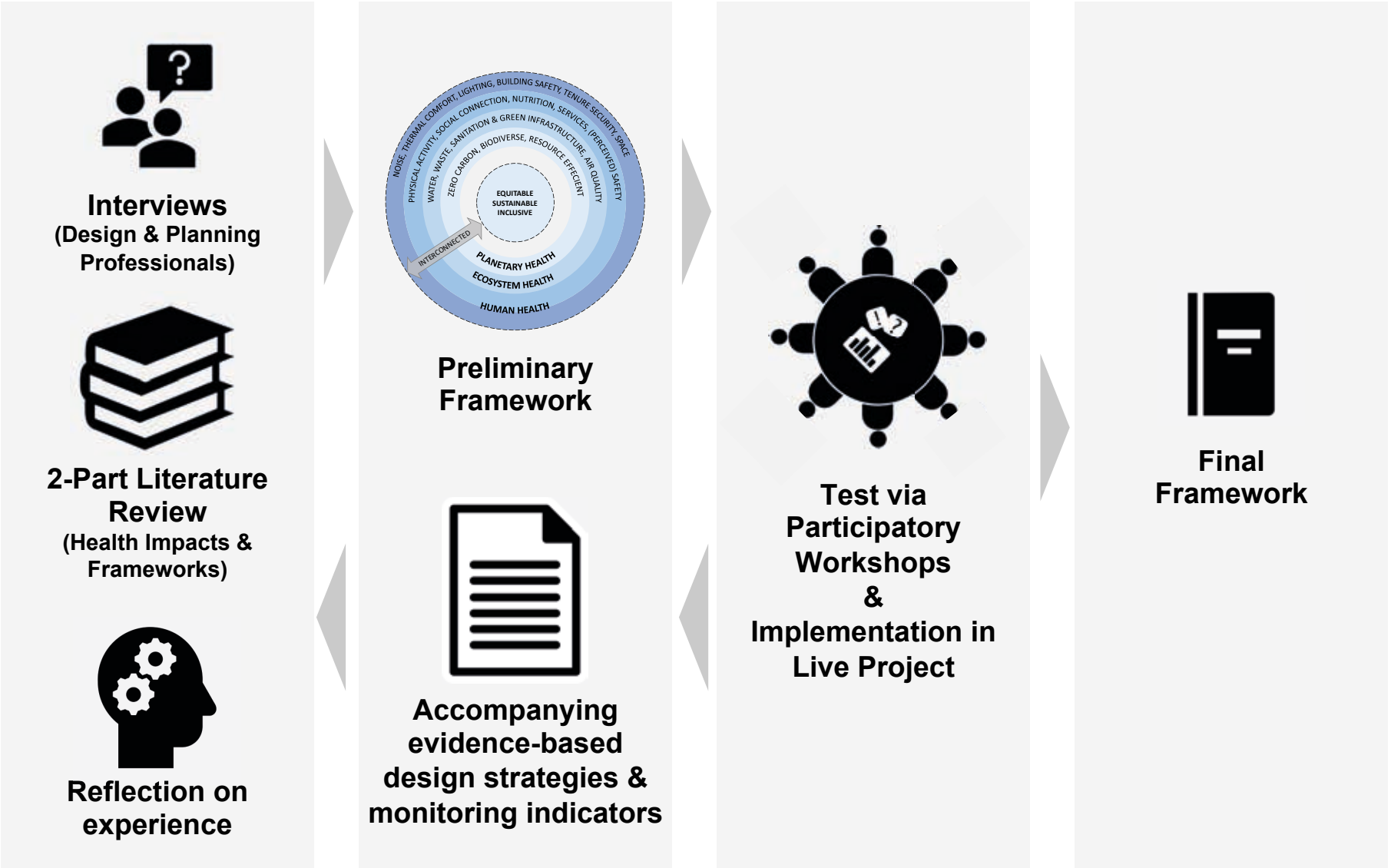
Peter Murray*

*Quoted from Horton (2012) who paraphrased the original speakers



A new Framework for Healthy Urban Design & Planning

Developing and testing the Framework



Preliminary interview findings



**19 participants in
China, UK and USA**

Architecture
Urban design
Engineering
Planning
Sustainability

Health isn't a new objective for us

The technologies and standards have shifted rapidly

Client & occupant expectations are shifting rapidly

Health & Sustainability are inextricably linked

They develop bespoke design approaches

Potential limitation: Speaking to 'the converted'?

Preliminary literature review findings



Healthy design &
planning frameworks

Health Impact
Evidence, using
Reviews

Importance of Planetary & Ecosystem Health

Importance of Equity & Inclusion

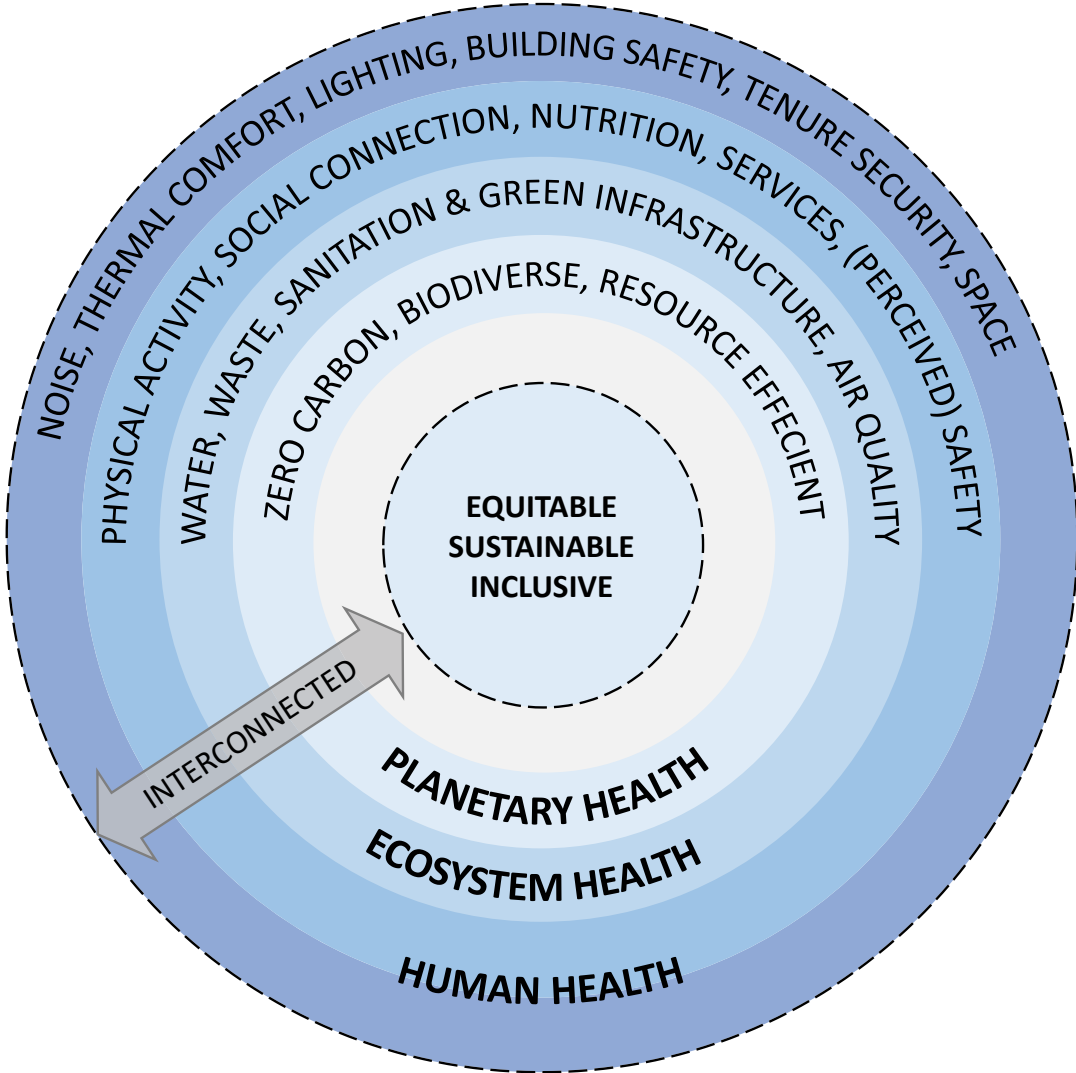
Co-benefits & Unintended consequences

Focus from individual factors moving out

Siloed nature of current guidance

Uncertainty of evidence base but need to act

A new PRELIMINARY Healthy Urban Design and Planning Framework

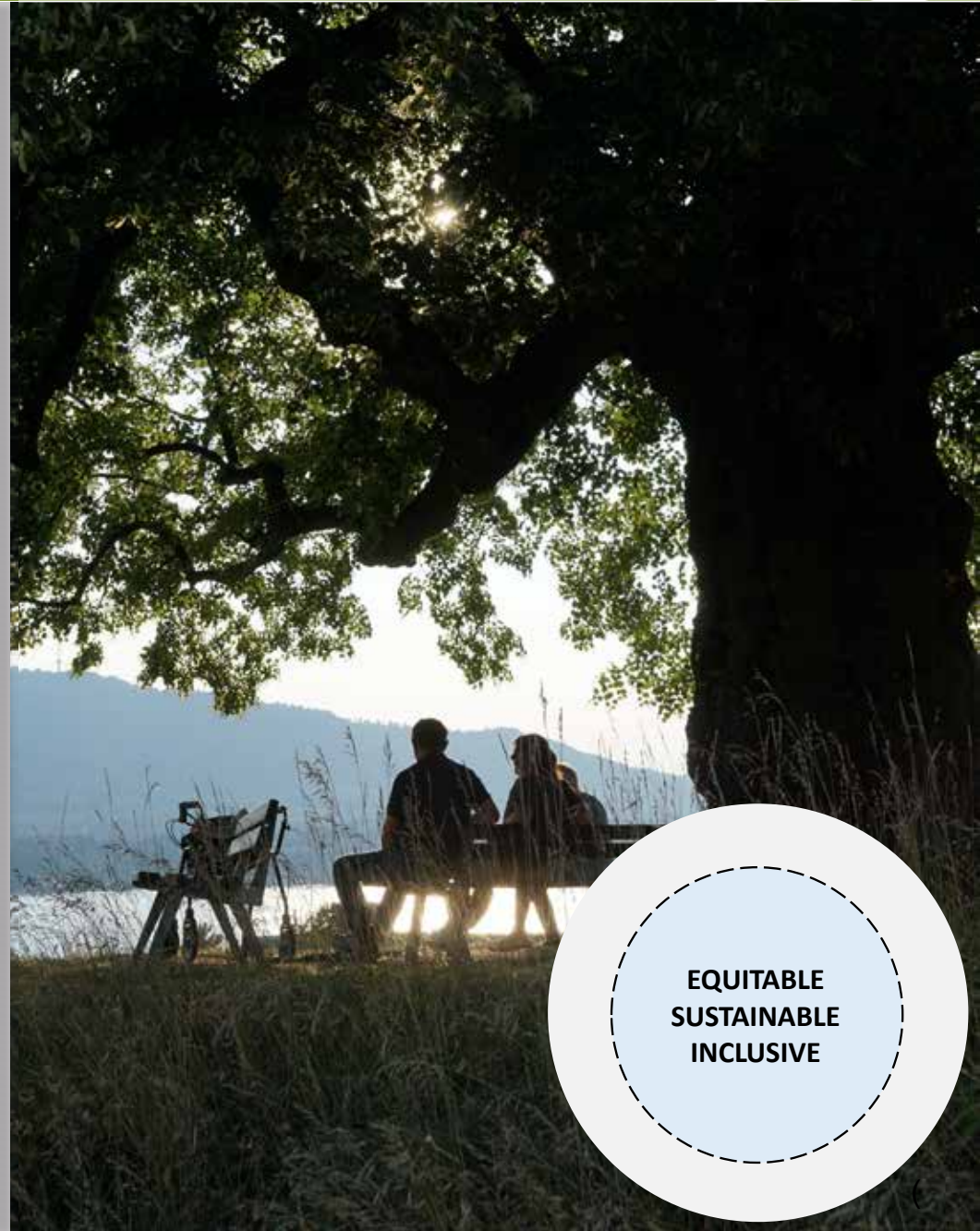


Three Core Principles

Sustainability: Triple bottom line with environment typically deprioritised

Equity: Recognises unfair differences in health caused by unfair distribution of health-promoting resources.

Inclusivity: Individuals' characteristics (e.g. age, gender, race) may require different design considerations.

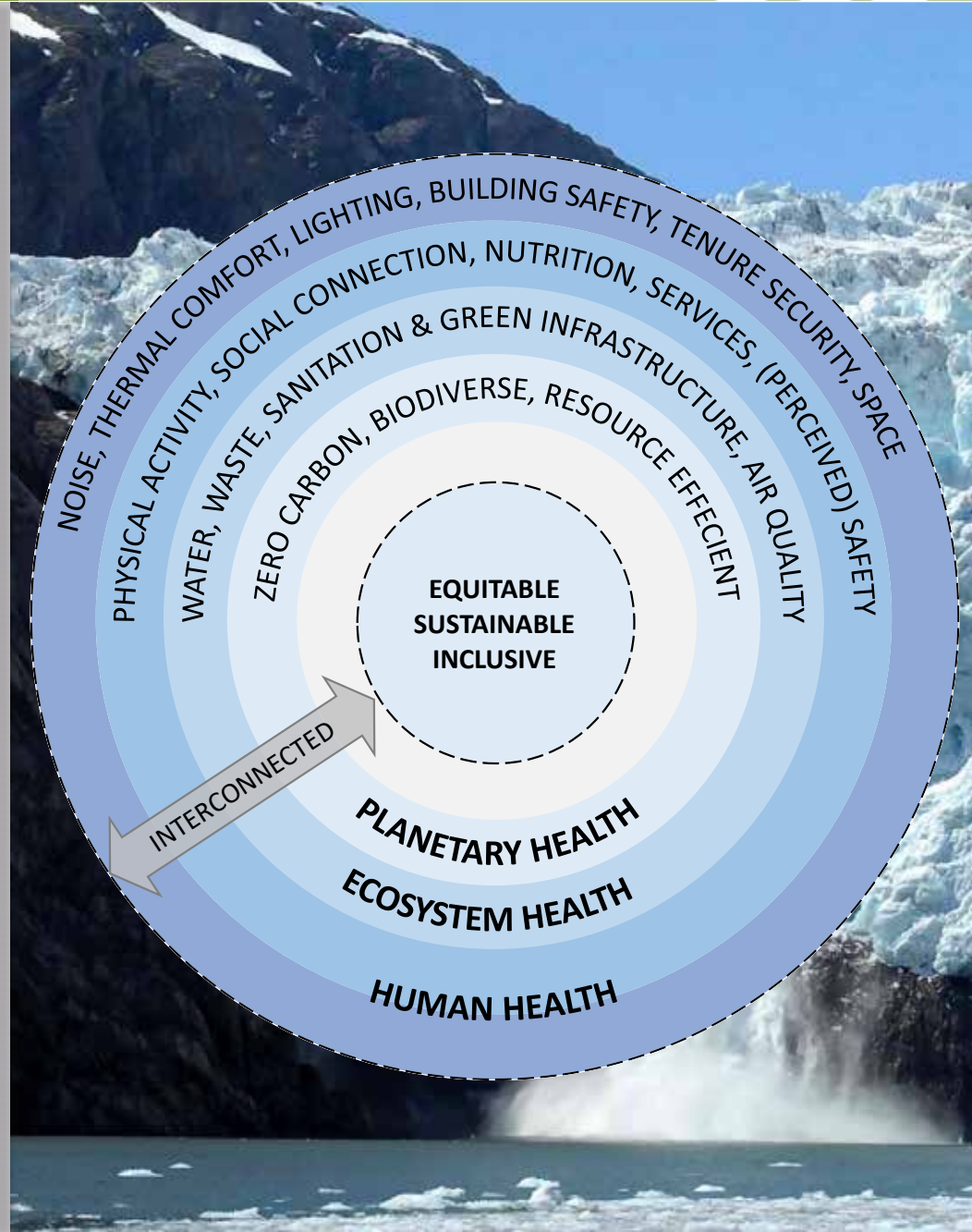


EQUITABLE
SUSTAINABLE
INCLUSIVE

Three Scales of Health Impact

Relates to spatial scales of policy and development.

Recognises that decisions taken in a city can impact health at a global level.



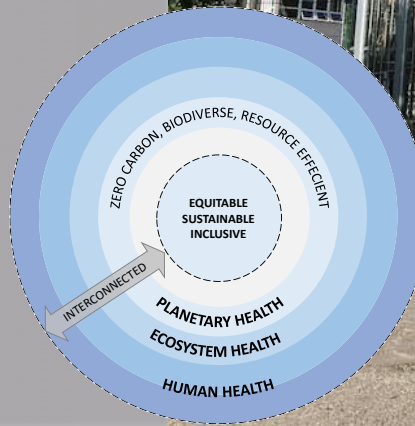
Planetary Health

‘the health of human civilisation and the state of the natural systems on which it depends.’
(Whitmee et al., 2015)

Goals: Zero Carbon, Biodiverse, Resource Efficient

Core Principle Links (e.g. equity): Poor people emit least carbon, but most vulnerable to climate change impacts.

Good looks like: The Bullitt Center, Seattle, WA, USA



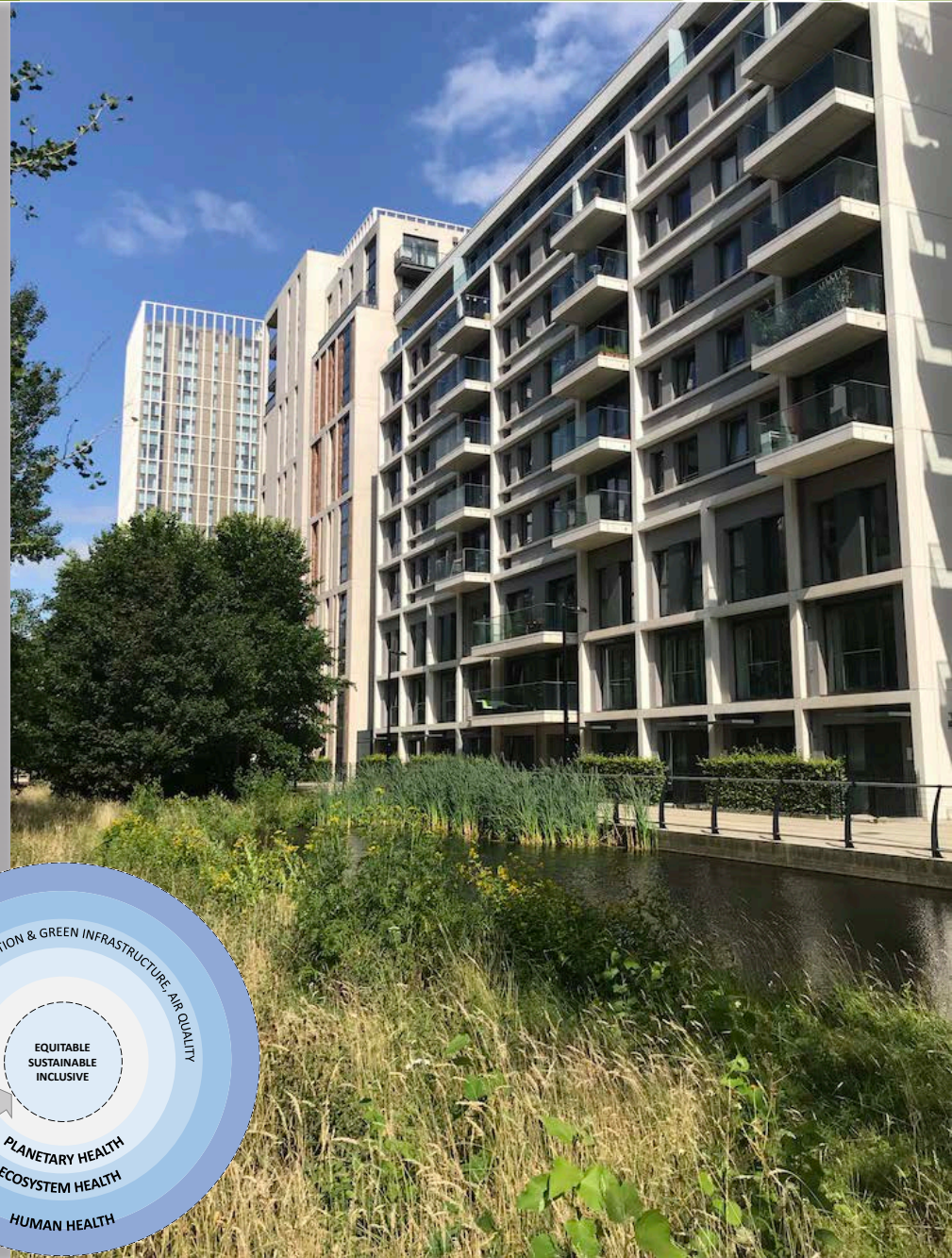
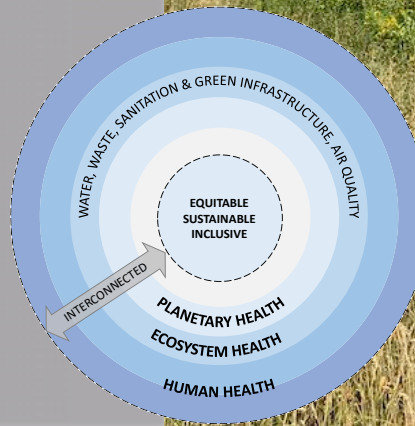
Ecosystem Health

Ecosystems are ‘webs of connections between living and non-living system components’ and they are foundational to human health. (Buse et al., 2018)

Goals: Water, Waste, Sanitation & Green Infrastructure, Air Quality

Core Principle Links (e.g. inclusive): Children, older people and those with existing conditions are disproportionately harmed by air pollution.

Good looks like: East Village, London, UK



Human Health

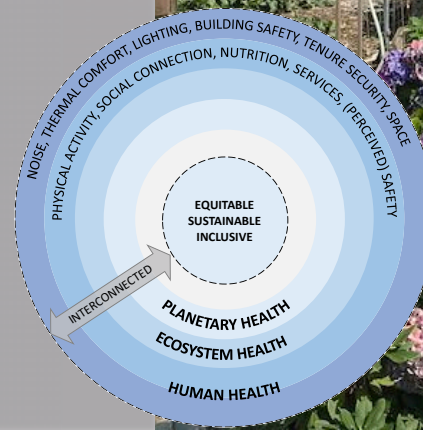
Two spatial scales:
neighbourhood and building

Neighbourhood Goals: Physical Activity, Social Connection, Nutrition, Services, (Perceived) Safety

Building Goals: Noise, Thermal Comfort, Lighting, Building Safety, Tenure Security, Space

Interconnections across 3 Scales: e.g. Physical Activity

Good looks like: Grow Community, Bainbridge, WA, USA



Preliminary Framework – Currently being tested

Currently funded by Guy's and St Thomas' Charity to implement and test the Framework at Royal Street.

Royal Street

Vision: 'An exemplar site for how to improve urban health through commercial property development'

Aims to draw on global best practice, alongside the charity's own work on urban health, to maximise the health and wellbeing benefits of the development.

Thanks also to part-funding from UCL Wellcome Trust funded project, Complex Urban Systems for Sustainability and Health (CUSSH)



References

Buse, C.G., Oestreicher, J.S., Ellis, N.R., Patrick, R., Brisbois, B., Jenkins, A.P., McKellar, K., Kingsley, J., Gislason, M., Galway, L., McFarlane, R.A., Walker, J., Frumkin, H., Parkes, M., 2018. Public health guide to field developments linking ecosystems, environments and health in the Anthropocene. *J Epidemiol Community Health* 72, 420–425. <https://doi.org/10.1136/jech-2017-210082>

Horton, R., 2012. Offline: An ignominious defeat. *The Lancet* 380, 94. [https://doi.org/10.1016/S0140-6736\(12\)61152-0](https://doi.org/10.1016/S0140-6736(12)61152-0)

Whitmee, S., Haines, A., Beyrer, C., Boltz, F., Capon, A.G., de Souza Dias, B.F., Ezeh, A., Frumkin, H., Gong, P., Head, P., Horton, R., Mace, G.M., Marten, R., Myers, S.S., Nishtar, S., Osofsky, S.A., Pattanayak, S.K., Pongsiri, M.J., Romanelli, C., Soucat, A., Vega, J., Yach, D., 2015. Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation–Lancet Commission on planetary health. *The Lancet* 386, 1973–2028. [https://doi.org/10.1016/S0140-6736\(15\)60901-1](https://doi.org/10.1016/S0140-6736(15)60901-1)

Thank you

Please send feedback and good practice examples!

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