Data indicators, data opportunities, data done

OECD Paris, May 2024

Emeritus Prof Jon Fairburn
jon.fairburn@staffs.ac.uk

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UK Data Progression over 25 years

From simple description of social gradients and patterns (usually using regulators data in the early days)

To incorporation into official statistics – in the UK – Indices of Multiple Deprivation – use in spatial targeted funding

Use in public facing GIS to provide risk and other information

More recently GIS systems work on physical stock linked to global warming threat (e.g. flooding) and opportunities (solar)

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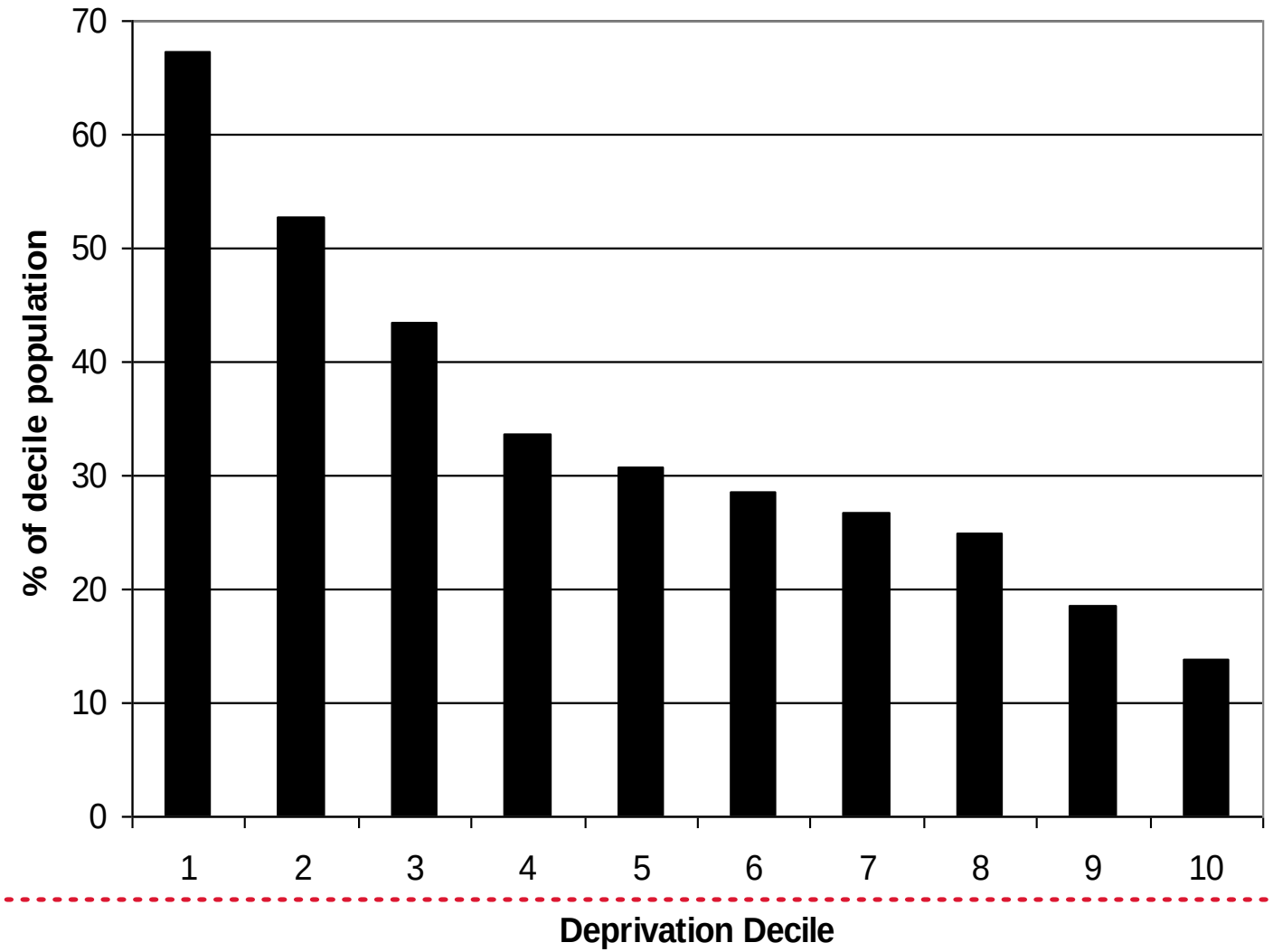
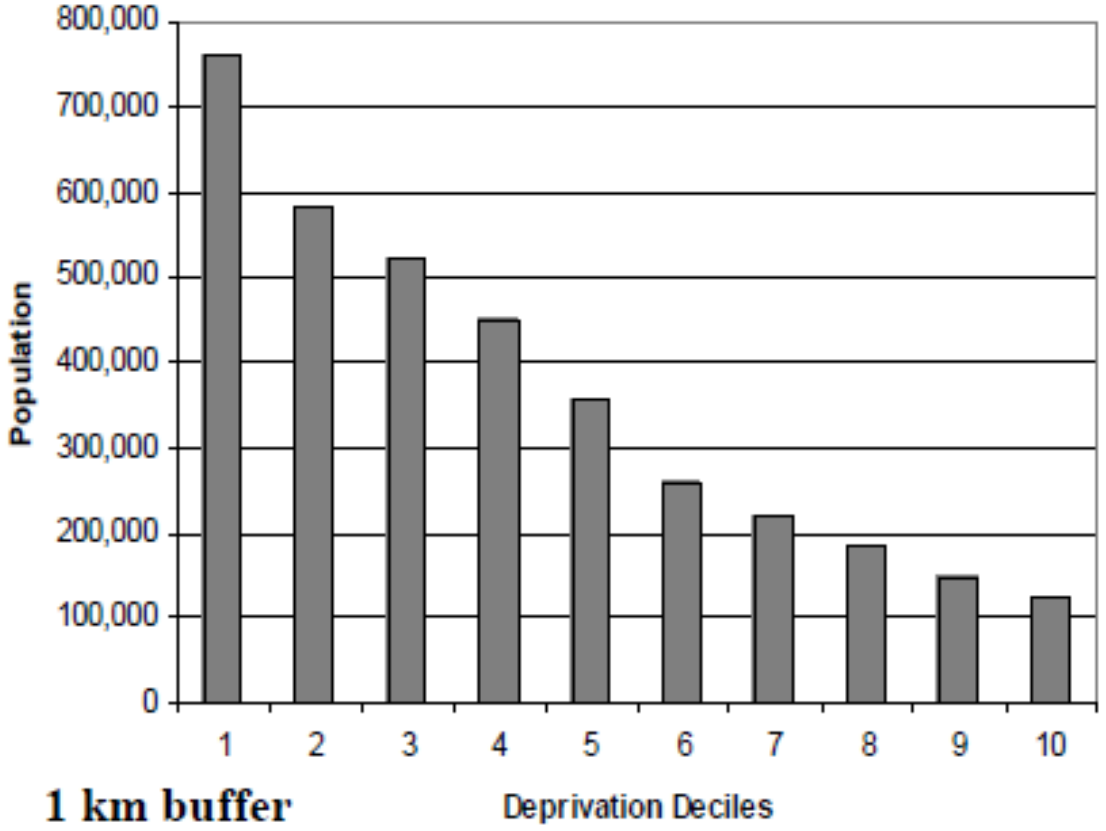
Population within 600metres of derelict land - Scotland



Total population with in 1km of an IPC site 2003



Populations living within 600 metres of woodlands in Scotland – grant awarding using IMD

Decile	All woodland Percentage	New woodland Percentage
1	55.3	18.7
2	58.3	14.5
3	55.1	14.4
4	58.3	15.8
5	61.1	15.0
6	62.9	15.2
7	65.1	12.8
8	64.1	13.0
9	64.9	10.1
10	65.6	8.9
Scotland	61.1	13.8

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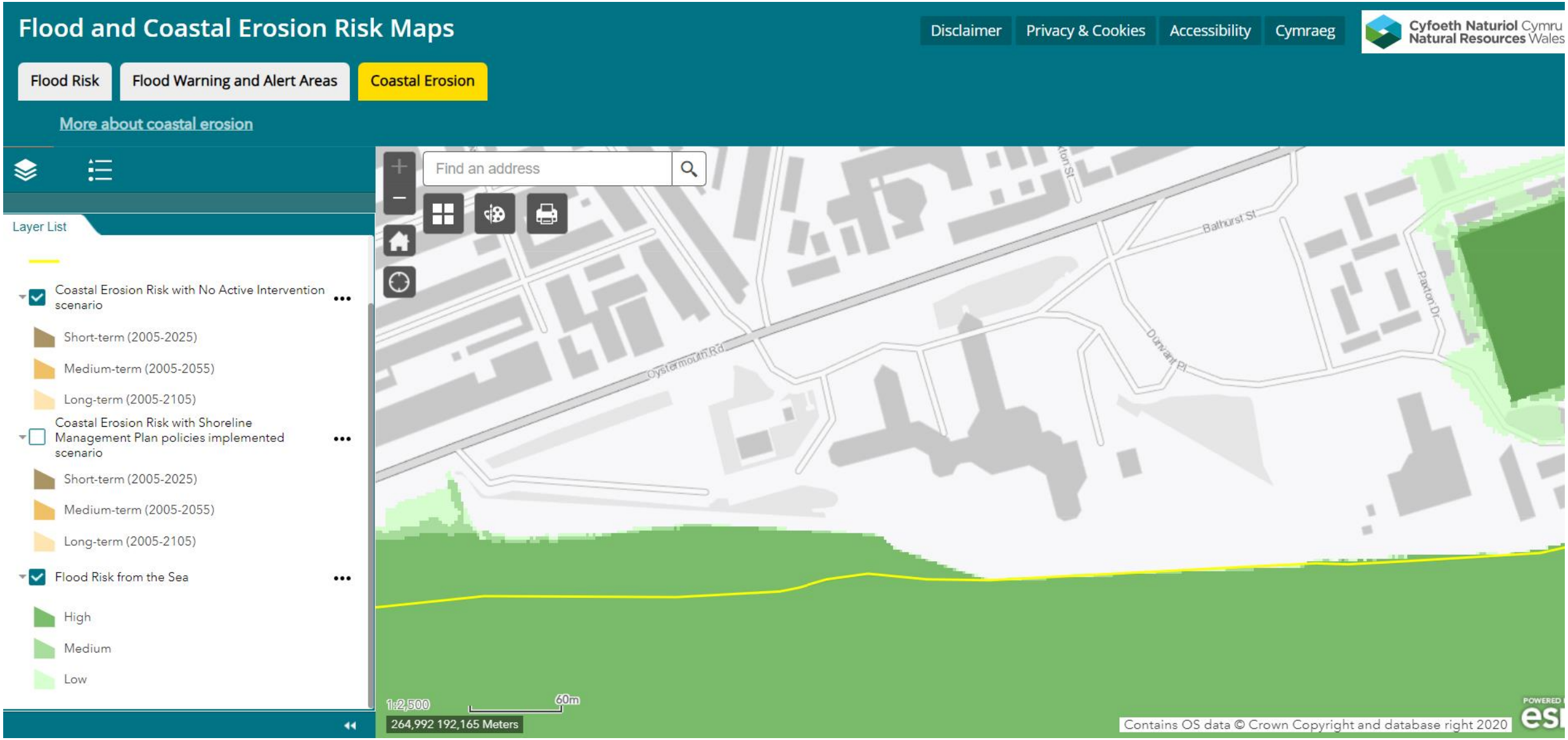

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Birmingham City Council **Solar Wizard** Map User guide

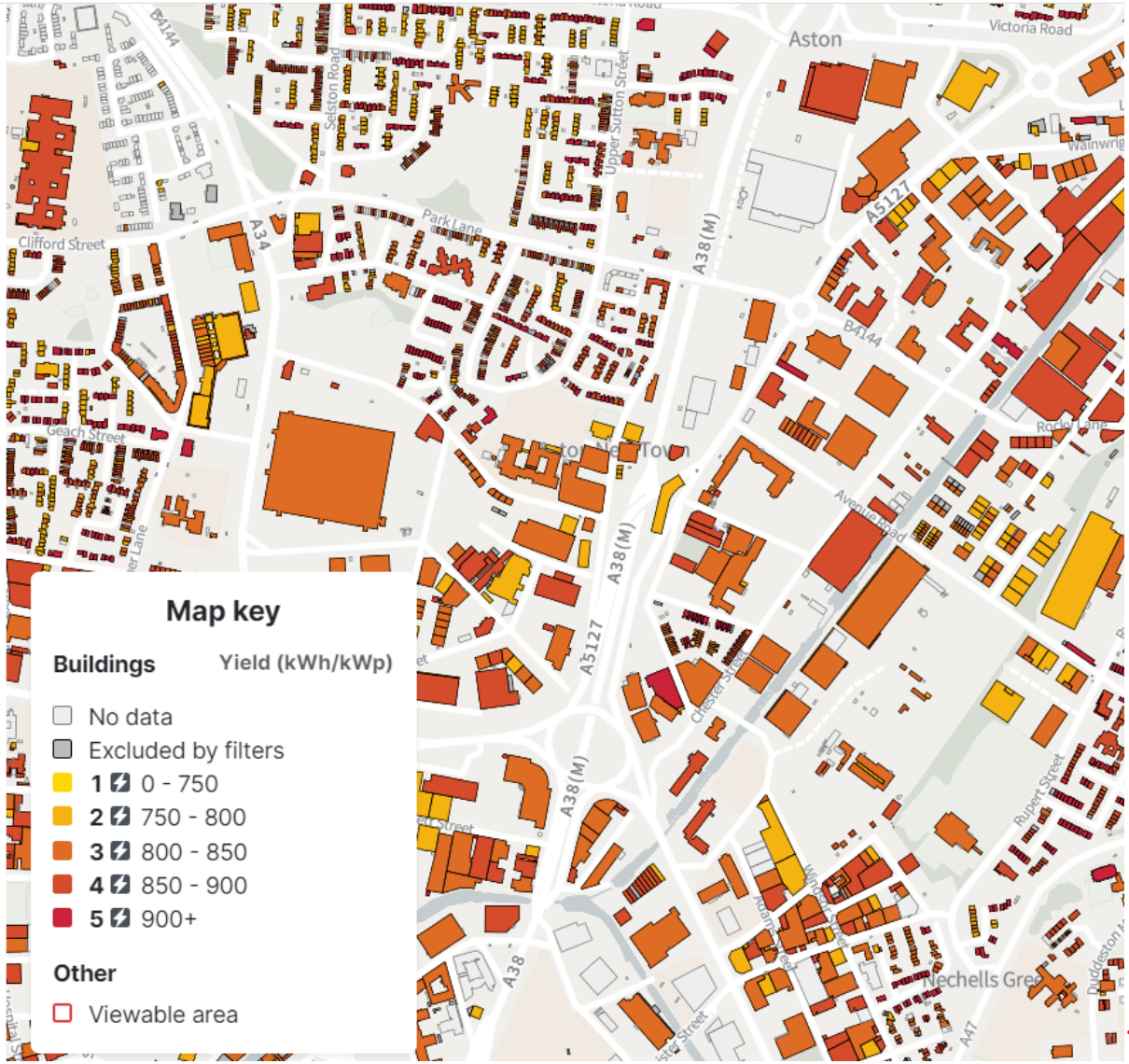
- Map Layers
- Filters
- About

Licensing and attributions

Solar Wizard was developed by CSE with funding from SBRI.

Solar Wizard PV suitability data was created using:

- Software and data from PVGIS: PVGIS © European Communities, 2001-2024
- Data licensed under the Open Government Licence v3.0. (English LiDAR; Scottish LiDAR; Welsh LiDAR)
- Ordnance Survey data: © Crown copyright and database rights 2024 OS AC0000846502
- PSGA number: AC0000819638



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Opportunities EU wide

Energy Performance Certificates of buildings

https://epc.opendatacommunities.org/ England – open access data and updated monthly

Potential to analyse retrofitting on a neighbourhood level linked to equity issues

World Health Organization

Experts and stakeholders working together over several years to produce:

1. WHO (2019) Environmental health inequalities in Europe. Second Assessment Report

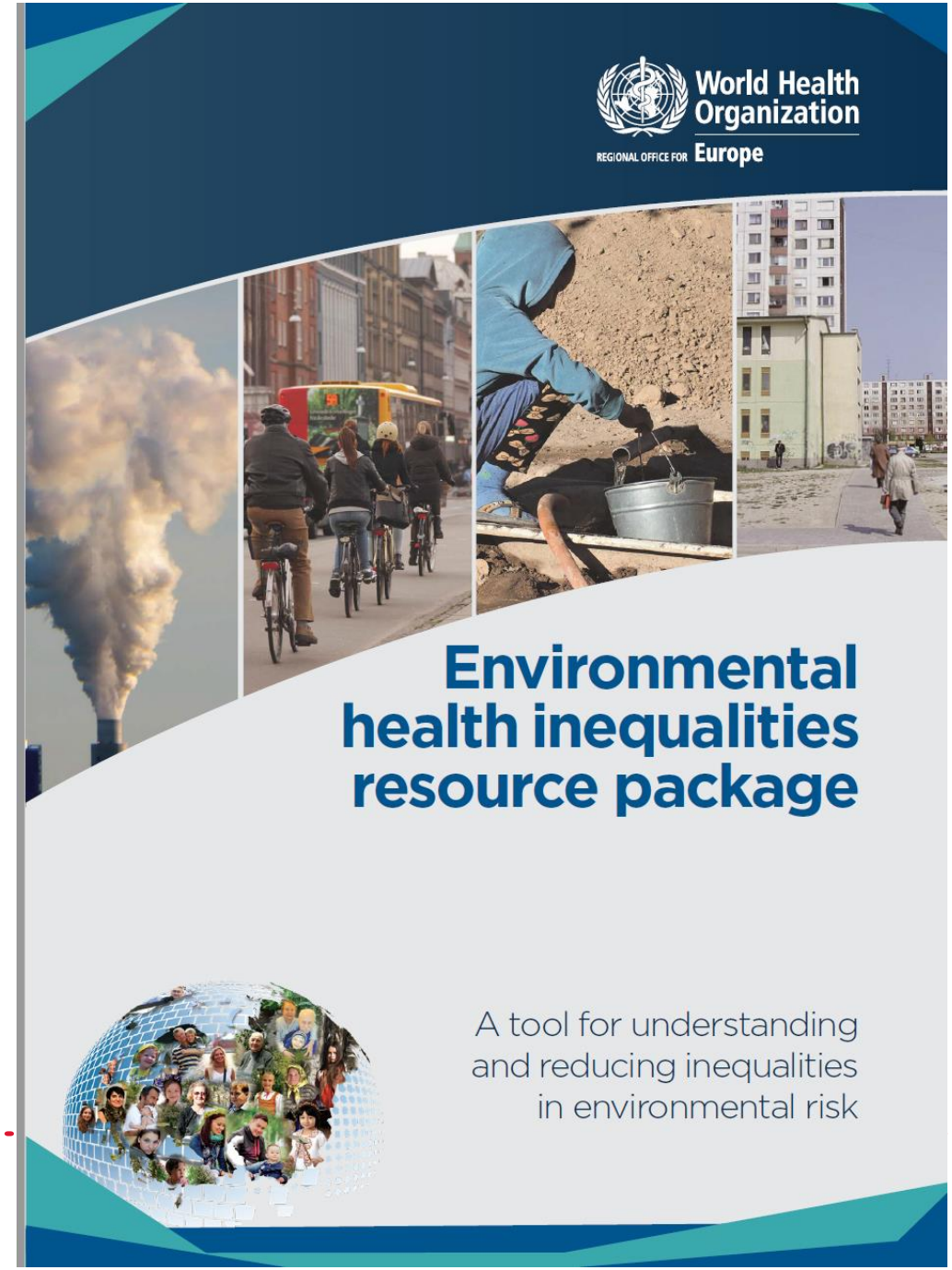
2. Systematic Reviews on social inequalities and environmental factors including air quality

3. Environmental health inequalities resource package

Each chapter essentially a policy briefing 4-6 pages

1. housing related
2. basic services
3. environment
4. work related
5. injury related

Within and between countries comparison



Aimed at local and national people tackling environmental inequalities and working to improve health and health equity

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USA

Developments in the USA

https://ejscreen.epa.gov/mapper/ details on the tool including training packages are here https://www.epa.gov/ejscreen

Justice 40 initiative – to deliver 40% of the overall benefits to disadvantaged communities and tracks the performance toward the goal through establishment of an Environmental Justice Scorecard.

RESOURCES

PLEASE NOTE THERE ARE ALSO SOME INFORMATION IN THE NOTES SECTION IN SOME OF THE SLIDES

Case study – addressing equity in flood protection measures in England

Case study of research impacting policy to address flooding and equity issues in England by the Environment Agency.

https://results2021.ref.ac.uk/impact/53e0bc4d-9f03-4a4f-a13e-ada61970fa92?page=1

Useful resources

Fairburn J, Schule S A, Hilz K L, Dreger S and Bolte G (2019) Social inequalities in air pollution: a review of evidence in the WHO European Region in International Journal of Environmental research and Public Health

https://doi.org/10.3390/ijerph16173127

Note the Supplementary data provided with the paper is very extensive

A blog which has all the work with the WHO and links for downloading is here

https://blogs.staffs.ac.uk/business/2020/06/21/new-publication-social-inequalities-in-exposure-to-ambient-air-pollution-a-systematic-review-in-the-who-european-region/

WHO (2019) Environmental health inequalities resource package: A tool for understanding and reducing inequalities in environmental risk

https://www.euro.who.int/en/health-topics/environment-and-health/health-impact-assessment/publications/2019/environmental-health-inequalities-resource-package

Peer review papers

FAIRBURN, Jonathan, **Maier, Werner** and **Braubach, Matthias** (2016) *Incorporating Environmental Justice into Second Generation Indices of Multiple Deprivation: Lessons from the UK and Progress Internationally.* Int. J. Environ. Res. Public Health, 13 (8).

MAIER, W., **FAIRBURN, Jonathan** and **MIELCK, A.** (2012) *Regionale Deprivation und Mortalität in Bayern. Entwicklung eines, Index Multipler Deprivation auf Gemeindeebene.* Das Gesundheitswesen, 74 (07). pp. 416-425. ISSN 0941-3790

Braubach, M. and **FAIRBURN, Jonathan** (2010) *Social inequities in environmental risks associated with housing and residential location--a review of evidence.* The European Journal of Public Health, 20 (1). pp. 36-42. ISSN 1101-1262

FAIRBURN, Jonathan, **Butler, Bridget** and **SMITH, Graham** (2009) *Environmental justice in South Yorkshire: locating social deprivation and poor environments using multiple indicators.* Local Environment, 14 (2). pp. 139-154. ISSN 1354-9839

Walker, G, **Michell, G**, **FAIRBURN, Jonathan** and **SMITH, Graham** (2007) *Industrial pollution and social deprivation: evidence and complexity in evaluating and responding to environmental inequality.* Local Environment, 10. pp. 361-377. ISSN 1469-6711

Contact information

Email jon.fairburn@staffs.ac.uk

Feel free to connect with me on Linkedin
https://www.linkedin.com/in/jonfairburn/

Twitter @profjonfairburn – includes an air quality list

My publications are here
https://eprints.staffs.ac.uk/view/creators/FAIRBURN=3AJon=3A=3A.html

Google scholar profile -
https://scholar.google.co.uk/citations?user=PuwDEnYAAAAJ&hl=en

Centre for Health and Development - https://www.chadresearch.co.uk/