

# Climate Research and Open Data at Oxford

Oxford Festival of Open Scholarship 2023

March 15<sup>th</sup> 2023 – 14:30-15:00

Lightning talks:

Jason Partridge

Jose Marie Valenzuela

David Hendry

Hannah Budnitz



This session will be recorded



Slides and handouts will be distributed after the session



Join us for more events at:  
<https://openaccess.ox.ac.uk/oxfos>



If you would like to tweet about this session please use: #OxFOs23



# Taking part

**The Teams chat is open and will be monitored,  
do add your own thoughts and questions!**



# Running order

Time	Item	Speaker(s)
14:30	Welcome and Introduction	Jason Partridge
14:35	Lightning Talks:	
	ORA: Institutional Repository at Oxford (and ORA Climate Research portal)	Jason Partridge
	Open Access and Climate Change in Governance studies	Dr Jose Maria Valenzuela
	Climate Econometrics	Professor Sir David F. Hendry
	The Importance of Going Electric Equitably... and Openly	Dr Hannah Budnitz
15:25	Questions and close	Jason Partridge

# Welcome and opening remarks

UNIVERSITY OF OXFORD

Our Research / True Planet (2021)

Donate

## True Planet (2021)

Perhaps one of the clearest lessons coming from the pandemic is the folly of ignoring known risks. The risks of climate change are becoming daily more apparent; we cannot afford to ignore the warning signs.' Vice-Chancellor Professor Louise Richardson

### Climate change and resource management

Climate Change: Why Do Social Sciences Matter?

Climate change - Climate change refers to long-term shifts in temperatures and...

Watch later Share

# CLIMATE CHANGE

## WHY DO SOCIAL SCIENCES MATTER?

OXFORD MARTIN SCHOOL

OXFORD

ENVIRONMENT HEALTH SOCIETY ECONOMY

The Oxford Martin Programme on

## THE FUTURE OF FOOD

### THE CHALLENGE

A significant overhaul of the current global food system is needed to meet the challenges of feeding a growing world population in a healthy, equitable, sustainable and resilient way.

By integrating existing research, supporting new interdisciplinary initiatives, a facilitating interactions between academia, government, civil society and the private sector, we provide fresh insights and propose effective action to address the challenges of feeding the global population.

Visit the Future of Food website >

Wytham Woods

the natural place for nature

HOME ABOUT VISIT US EVENTS WOODSCAPES GET INVOLVED RESEARCH VIDEOS EDUCATION CONTACT US

We Are Wytham Woods

WE ARE WYTHAM WOODS

Watch on YouTube

Wytham Woods form an iconic location that has been the subject of continuous ecological research programmes, many dating back to the 1940s. The wooded parts of the Wytham Estate comprise ancient semi-natural woodland (dating to the last Ice Age), secondary woodland (dating to the seventeenth century), and modern plantations (1950s and 60s). The fourth key habitat is the limestone grassland found at the top of the Hill. Other smaller habitats include a valley-side mire and a series of ponds.

The site is exceptionally rich in flora and fauna, with over 500 species of plants, a wealth of woodland habitats, and 800 species of butterflies and moths. Wytham Woods are often quoted as being one of the most researched pieces of woodland in the world. Covering 1000 acres, they are designated as a Site of Special Scientific Interest.

News

Order by publication date

Harvest Fest Clear

Museum of Natural History

VISIT US COLLECTIONS LEARN RESEARCH SHOP DONATE

BIODIVERSITY: Kurt Jackson

# Biodiversity

## KURT JACKSON

3 FEBRUARY – 15 MAY 2022

### SPECIAL EXHIBITION

FREE ENTRY

Bringing together the celebrated art of Kurt Jackson with reflections from Oxford University researchers, this exhibition explored biodiversity across British landscapes and considered the future of our country's habitats.

# ORA: <https://ora.ox.ac.uk/>

The screenshot displays the ORA website interface. At the top, there is a dark blue navigation bar with the ORA logo (Oxford University Research Archive) and the University of Oxford logo. Navigation links for 'DEPOSIT' and 'HELP' are visible, along with a refresh icon and a pin icon. Below the navigation bar is a large banner area with a map of Oxford in the background. The banner text reads 'EXPLORE THE UNIVERSITY OF OXFORD'S WORLD-CLASS RESEARCH'. A search bar is present with the placeholder text 'Enter your search here' and a dropdown menu set to 'All Fields'. A 'CONTACT' button is located on the right side of the banner. Below the banner are three main content sections: 'Deposit', 'In focus', and 'In numbers'. The 'Deposit' section explains that members of the University of Oxford can deposit research to ORA. The 'In focus' section features a tweet from Manuel Muñiz (@manuelmuniz) about his PhD thesis being available for download. The 'In numbers' section contains a pie chart showing the distribution of research types, with 'Journal article' being the most prominent category at 80.6%.

**ORA**  
OXFORD UNIVERSITY RESEARCH ARCHIVE

**UNIVERSITY OF OXFORD**

DEPOSIT HELP

EXPLORE THE UNIVERSITY OF OXFORD'S WORLD-CLASS RESEARCH

Enter your search here / All Fields

**CONTACT**

**Deposit**

Members of the University of Oxford can deposit a wide range of research to ORA including articles, conference papers, theses and data.

> DEPOSIT

**In focus**

Tweets by @oxforduni\_repo

ORA Retweeted

**Manuel Muñiz**  
@manuelmuniz

Yesterday I asked Oxford University's Research Archive to make my PhD Thesis available for download. If you are interested in the effects of interdependence on how states run their security policy, here is a...

**In numbers**

- Journal article (80.6%)
- Confere...
- Thesis
- Confere...
- Book section
- Other

More stats...

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**Bodleian Libraries**  
UNIVERSITY OF OXFORD

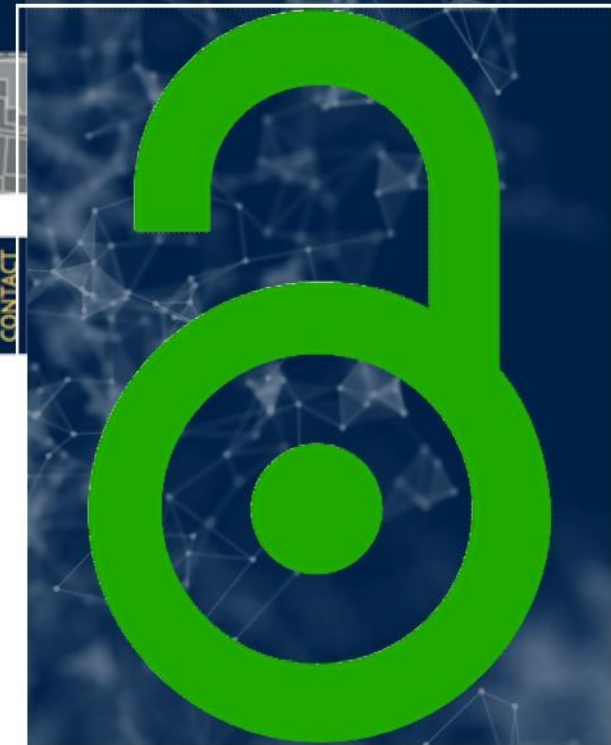
**oxFoS**  
2023

**BODLEIAN LIBRARIES**



# ORA: an Institutional Repository

The screenshot displays the ORA website interface. At the top, there are navigation links for 'NEW SEARCH', 'DEPOSIT', and 'HELP'. A search bar is present with the text 'Enter your search here' and a dropdown menu for 'All Fields'. Below the search bar, there are filters for 'Item Type', 'File Availability', 'Department', 'College', 'Research Group', 'Subject', 'Language', 'Thesis Type', 'Funder', and 'Item Date'. The search results are displayed in a list format, showing the first five items. Each item includes a number, an icon, the title, author(s), and date. The first item is a journal article titled 'The poetry of antiques: Trade and/in knowledge among British antiques dealers' by Makovicky, NM, dated 2018-03-30. The second item is a thesis titled 'Αἰών and χρόνος, Their semantic development in the Greek poets and philosophers down to 400 BC' by Sandra Šćepanović, dated 2012. The third item is a journal article titled 'Data sharing among data monitoring committees and responsibilities to patients and science' by Chalmers, I, Altman, DG, McHaffie, H, et al., dated 2013-01-01. The fourth item is a journal article titled 'Estimate at your peril: imputation methods for patient withdrawal can bias efficacy outcomes in chronic pain trials using responder analyses' by Moore, RA, Straube, S, Eccleston, C, et al., dated 2012-02-05. The fifth item is a journal article.



# ORA: record information

Back to Search

ACTIONS

ACCESS DOCUMENT

AUTHORS/CREATORS

FUNDING

BIBLIOGRAPHIC DETAILS

ITEM DESCRIPTION

RELATED ITEMS

TERMS OF USE

METRICS



Dataset

Equity and inclusivity in research funding: barriers and delivering change



Actions



Access Document



EquityAndInclusivityIn...

(Version of record, pdf, 1.4MB)

Authors/Creators

Gladstone, J

More by this author/creator

Schipper, L

More by this author/creator

Hara-Msulira, T

More by this author/creator

Cascl, T

More by this author/creator

Contributors

Allen, K

Carter, H

Lee, Z

Lockie, J

Funding

Wellcome Trust

More from this funder

Funder identifier: <http://dx.doi.org/10.13039/100010269>

Funding agency for: Gladstone, J

Grant: 204826/Z/16/Z

University of Oxford

More from this funder

Funder identifier: <http://dx.doi.org/10.13039/501100000769>

Funding agency for: Gladstone, J

FUNDING

BIBLIOGRAPHIC DETAILS

Bibliographic Details

Publisher: University of Oxford

Publication date: 2023

Spatial coverage: UK

DOI: 10.5287/bodleian:kZjBY77pO

Temporal coverage: 2021 - 2022

ITEM DESCRIPTION

RELATED ITEMS

TERMS OF USE

METRICS

Item Description

Language: English  
Keywords: inclusion  
research funding  
equity  
funding  
research culture  
inclusivity  
EDI  
diversity  
equality

Subjects: Equality--Great Britain  
Education, Higher

Deposit date: 2022-12-16

Related Items

Related item: Equity and inclusivity in research funding: barriers and delivering change

Terms of use

Copyright holder: University of Oxford

Copyright date: 2023

Licence: Terms and Conditions of Use for Oxford University Research Archive

Metrics

If you are the owner of this record, you can report an update to it here: [Report update to this record](#)

Metrics

Views and Downloads



About views and downloads

Altmetrics



News (552)  
Blogs (95)  
Policy documents (16)  
Twitter (4759)  
Facebook (30)  
Wikipedia (50)  
Google+ (14)

Dimensions



# ORA: sharing content

rioxx

DataCite

## Metadata Format

metadataPrefix	oai_dc
metadataNamespace	<a href="http://www.openarchives.org/OAI/2.0/">http://www.openarchives.org/OAI/2.0/</a>
schema	<a href="http://www.openarchives.org/OAI/2.0/oai_dc.xsd">http://www.openarchives.org/OAI/2.0/oai_dc.xsd</a>

SOLO  
SEARCH OXFORD  
LIBRARIES ONLINE

OpenAIRE

## Metadata Format

metadataPrefix	solo_dc
metadataNamespace	<a href="http://ora.ox.ac.uk/oai-pmh/metadata-formats/solo_dc">http://ora.ox.ac.uk/oai-pmh/metadata-formats/solo_dc</a>
schema	<a href="http://ora.ox.ac.uk/oai-pmh/metadata-formats/solo_dc/to-be-written">http://ora.ox.ac.uk/oai-pmh/metadata-formats/solo_dc/to-be-written</a>

Google

BASE

## Metadata Format

metadataPrefix	uketd_dc
metadataNamespace	<a href="http://naca.central.cranfield.ac.uk/ethos-oai/2.0/">http://naca.central.cranfield.ac.uk/ethos-oai/2.0/</a>

CORE

LIBRARY  
HSILIRB

ETHOS  
e-theses online service

```
<?xml version="1.0" encoding="UTF-8" ?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:dc="http://purl.org/dc/elements/1.1/" xmlns:dcterms="http://
xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#" xmlns="http://namespace.openaire.eu/schema/openaire/" elementFormDefault="qualified" targetNamespace="http://namespace.op
https://www.w3.org/2012/04/XMLSchema.xsd">
  <xs:import namespace="http://purl.org/dc/elements/1.1/" schemaLocation="dc.xsd"/>
  <xs:import namespace="http://purl.org/dc/terms/" schemaLocation="dcterms.xsd"/>
  <xs:import namespace="http://datacite.org/schema/kernel-4" schemaLocation="datacite-v4.xsd"/>
  <xs:include schemaLocation="oaire.xsd"/>
  <xs:element name="resource">
    <xs:annotation>
      <xs:documentation> This schema defines the xml format for OpenAIRE Guidelines for Literature Repositories v4. The schema represents an application profile consisting of
rdf:resource * elements from DataCite metadata schema v4.1 to express granular information on creator, contributor, fundingReference, relatedIdentifier, alternateIdentifi
citation details, (fulltext) files, version and license condition </xs:documentation>
    </xs:annotation>
    <xs:complexType>
      <xs:choice maxOccurs="unbounded">
        <xs:element ref="dc:coverage" minOccurs="0">
          <xs:annotation>
```



What's the point?

# ORA: policy and mandates

## Deposit your research in ORA

There are three routes of deposit to ORA. The main route of deposit for publications and grey literature, such as working papers and reports is via Symplectic Elements, which is also the chosen route for Oxford academics to 'Act on Acceptance'. The other deposit portals are for theses and research data only.

Research	Theses	ORA-Data
For 'Act on Acceptance' and publications such as journal articles, conference papers, book chapters, reports, working papers, etc.	For research theses (e.g. D.Phil., M.Litt. & M.Sc. by Research) – deposit of theses is a mandatory requirement for those completing a research degree.	For any type of digital research data, especially data that underpins publications, or data where the funding body requires archiving and preservation.
<a href="#">DEPOSIT RESEARCH</a>	<a href="#">DEPOSIT THESIS</a>	<a href="#">DEPOSIT DATA</a>
> <a href="#">Guidance on depositing research</a>	> <a href="#">Guidance on depositing thesis</a>	> <a href="#">Guidance on depositing data</a>

If you encounter problems trying to make your submission to ORA please contact [ora@bodleian.ox.ac.uk](mailto:ora@bodleian.ox.ac.uk) and we will arrange an alternative method for the upload of your work to ORA. Apologies for any inconvenience caused.

Oxford researchers have policy and mandates that require engagement and deposit with ORA, including from funders and regulations surrounding research degrees.

### University of Oxford Rights Retention Pilot

#### Rights Retention at Oxford

This site provides information for Oxford researchers and support staff participating in the Rights Retention Pilot.

Rights retention is a [new funder-led initiative](#) that supports the [self-archiving route](#) to open access.

# ORA: removing barriers to research

*Making research open access through a repository such as ORA removes the barriers that restrict access to research.*

# ORA: removing barriers to research

ORA OXFORD UNIVERSITY RESEARCH ARCHIVE

UNIVERSITY OF OXFORD

NEW SEARCH ABOUT DEPOSIT HELP

## ORA CLIMATE RESEARCH COLLECTION

Search the ORA Climate Research Collection / All Fields

Climate research continues to be an area of increased importance globally. There are many departments and groups across the University of Oxford that focus on fundamental areas of research to help support change and development, with experts in their fields contributing to key discussions, studies, and policy - resulting in a wealth of publications and research outputs.

The ORA Climate Research Collection brings together the many journal articles, conference papers, working papers, preprints, and more - produced by the members of the University of Oxford, held with full text by ORA, as well as providing links to related climate research information and activities at the University at other locations. We welcome your thoughts, comments and suggested additions.

If you are a member of the University of Oxford and can't see your climate research related paper here, then deposit your accepted manuscript to ORA.

<p><b>Featured Article</b></p> <p>Book section</p> <p><b>Geographies of climate change belief</b></p> <p>Hopkins, DM, Markowitz, EM</p> <p><a href="#">Read Article</a></p>	<p><b>Featured Article</b></p> <p>Report</p> <p><b>Climate Change Scenarios for the United Kingdom - Technical Report No 1</b></p> <p>Hulme, M, Jenkins, G</p> <p><a href="#">Read Article</a></p>	<p><b>Featured Article</b></p> <p>Report</p> <p><b>Climate Change and Nature Conservation in Britain and Ireland</b></p> <p>Cook, C, Harrison, P</p> <p><a href="#">Read Article</a></p>
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Latest research from across the University

<p><b>Medical Sciences</b></p> <ul style="list-style-type: none"> <li>Wellbeing indices: a comprehensive inventory of standards and a review of current comparative mea...</li> <li>Divergent polo boxes in</li> </ul>	<p><b>Maths, Physical &amp; Life Sciences</b></p> <ul style="list-style-type: none"> <li>Ocean biogeochemical optimisation in Earth System Models</li> <li>OxCOVID19 Database, a multimodal data repository</li> </ul>	<p><b>Social Sciences</b></p> <ul style="list-style-type: none"> <li>OxCOVID19 Database, a multimodal data repository for better understanding the global impact of CO...</li> <li>Hidden in plain sight: a</li> </ul>	<p><b>Humanities</b></p> <ul style="list-style-type: none"> <li>The history of Thessaly, 1266-1393</li> <li>Uncertainty, climate, and God: a transcendental naturalistic approach to</li> </ul>
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ORA OXFORD UNIVERSITY RESEARCH ARCHIVE

UNIVERSITY OF OXFORD

NEW SEARCH DEPOSIT HELP

## ORA COVID-19 COLLECTION

Search the ORA COVID Collection / All Fields

The University of Oxford has been at the forefront of the international response to the COVID-19 pandemic. Much of this activity is reflected in the wide array of research outputs - journal articles, conference papers, working papers, preprints, and more - that have been produced in this area.

This ORA COVID-19 Collection seeks to provide a one-stop point of access to all of these outputs, focusing on the full-text items available via ORA, and links to Oxford COVID-related research in a range of other locations. This is an early release of a live collection that is still being developed and we value your thoughts, comments and suggested additions.

If you are a member of the University of Oxford and can't see your COVID related paper here, then deposit your accepted manuscript to ORA.

<p><b>Featured Article</b></p> <p>Journal article</p> <p><b>Dexamethasone in hospitalized patients with Covid-19 - preliminary report</b></p> <p>Haynes, R, Emberson, I, Avczak, E, et al.</p> <p><a href="#">Read Article</a></p>	<p><b>Featured Article</b></p> <p>Journal article</p> <p><b>An analysis of ways to decarbonize conference travel after COVID-19</b></p> <p>Allen, M, Hopkins, D, Kivner, M, et al.</p> <p><a href="#">Read Article</a></p>	<p><b>Featured Article</b></p> <p>Journal article</p> <p><b>Mental health during the first year of the COVID-19 pandemic: a review and recommendations for moving forward</b></p> <p>De Nova, J-E, Fancourt, D, Halliwell, J, et al.</p> <p><a href="#">Read Article</a></p>
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Latest research from across the University

Medical Sciences | Maths, Physical & Life Sciences | Social Sciences | Humanities

# ORA: summary

- ORA accepts an array of research publications, including but not limited to journal articles; conference papers; working papers; theses; reports; book sections and posters.
  - <https://libguides.bodleian.ox.ac.uk/ora>
- Underlying research data can be deposited and made available with a DOI (Digital Object Identifier), via ORA and linked to your research publication(s) and/or theses.
  - <https://libguides.bodleian.ox.ac.uk/ora-data>
- Deposit of any D.Phil., M.Litt. and M.Sc. (by research) thesis into ORA is mandatory.
  - <https://libguides.bodleian.ox.ac.uk/digitaltheses>
- ORA provides greater visibility for your work – we're heavily crawled by Google!
- Making your research open access removes the barriers that restrict access to research, at a benefit to all.
- The ORA team can be contacted via the ORA helpdesk – [ora@bodleian.ox.ac.uk](mailto:ora@bodleian.ox.ac.uk)

# Open Access and Climate Change in Governance studies

Dr Jose Maria Valenzuela  
Institute for Science, Innovation  
and Society (InSIS), School of Anthropology  
University of Oxford





Zero-emissions  
electricity



Ocean Carbon  
Dioxide Removal



Soils Carbon Dioxide  
Removal

“There can be no public without full publicity in respect to all consequences which concern it. Whatever obstructs and restricts publicity, limits and distorts thinking on social affairs.”

John Dewey (1927)




“The man who wears the shoe knows best that it pinches and where it pinches, even if the expert shoemaker is the best judge of how the trouble is to be remedied!

John Dewey (1927)

# Net Zero Tracker

*Example of timely collaboration academia - NGOs*

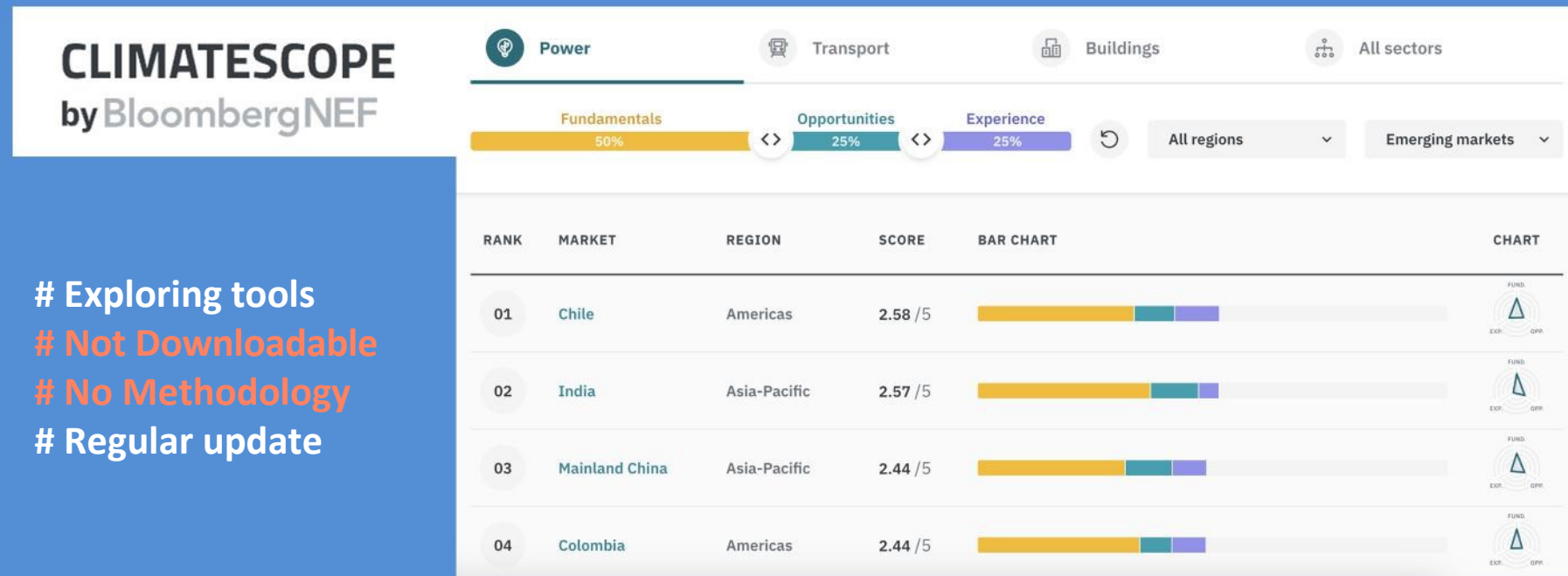


NAME	COUNTRY	SECTOR	ANNUAL REVENUE	TARGET YEAR	TARGET TYPE	END TARGET STATUS	INTERIM TARGET	DETAILED PLAN
<a href="#">América Móvil</a>	MEX	Services	\$47bn	2050	Carbon neutral(ity)	In corporate strategy	2030	<span style="color: orange;">●</span>
Femsa	MEX	Food, beverage & agriculture	\$23bn		No target	In corporate strategy		
<a href="#">Alfacar</a>	MEX	NA	\$17bn	2020	Emissions reduction target	Declaration / pledge		<span style="color: orange;">●</span>
Grupo Bimbo	MEX	Food, beverage & agriculture	\$15bn		No target			

- # Exploring tools
- # Downloadable
- # Methodology
- # Regular update
- # Granular data

# Climatescope by Bloomberg NEF


*Example of a deterioration of publicity of information*




- # Exploring tools
- # Not Downloadable
- # No Methodology
- # Regular update

# Regulatory Indicators for Sustainable Energy


*Example on the scarcity of governance information*



**RISE** Regulatory Indicators for Sustainable Energy



What is RISE?



**Mexico**

Overall Score **85**

<b>100</b>	<b>N/A</b>	<b>91</b>	<b>64</b>
ELECTRICITY ACCESS	CLEAN COOKING	RENEWABLE ENERGY	ENERGY EFFICIENCY

Go to country reports

# Exploring tools

# Not Downloadable

# No Methodology

# Regular update

# **Index-based**

**Analytics**  
Compare across countries

**Report**  
Read RISE report

# Thank you

Dr Jose Maria Valenzuela  
[jose.valenzuela@insis.ox.ac.uk](mailto:jose.valenzuela@insis.ox.ac.uk)



## CLIMATE ECONOMETRICS

JENNIFER L. CASTLE & DAVID F. HENDRY

*Climate Econometrics*, Nuffield College, Smith School for Enterprise  
and the Environment and INET Oxford University

Climate Research Meeting: 15 March 2023

**Climate Econometrics** is a research group that applies statistical methods to disentangle complex relationships between human actions and climate responses & their economic effects.

Research is two-fold: develop fundamental statistical theory & econometric methodology to support empirical analysis, and climate applications using our innovative modelling techniques.

**Climate Econometrics** is a research group that applies statistical methods to disentangle complex relationships between human actions and climate responses & their economic effects.

Research is two-fold: develop fundamental statistical theory & econometric methodology to support empirical analysis, and climate applications using our innovative modelling techniques.

## Research activities





## A selection from the research at Climate Econometrics:

- **Slide 3-4: Andrew Martinez, Model Selection**  
“Forecast accuracy matters for hurricane damages”.
- **Slide 5-8: Felix Pretis, Lea Schneider, Jason E. Smerdon & David Hendry, Indicator Saturation** “Detecting Volcanic Eruptions in Temperature Reconstructions by Designed Break-Indicator Saturation”.
- **Slide 9: Jennifer Castle & David Hendry, Long-run Scenarios**  
“Identifying the causal role of CO<sub>2</sub> during the Ice Ages”.
- **Slide 10: David Hendry, Determinants of CO<sub>2</sub> Emissions**  
“First in, First out: Econometric Modelling of UK Annual CO<sub>2</sub> Emissions, 1860–2017”.
- **Slide 11: Felix Pretis, Moritz Schwarz, Kevin Tang, Karsten Haustein & Myles R. Allen, Climate Modelling** “Uncertain impacts on economic growth when stabilizing global temperatures at 1.5°C or 2°C warming”.
- **Slide 12: Jennifer Castle & David Hendry, Implementing Net-zero**  
“Five Sensitive Intervention Points to Achieve Climate Neutrality by 2050”.

Embed forecast uncertainty in a general model of hurricane damages and use *Autometrics* automatic model selection:

Income Population Housing Units Historical Frequency



Wind Speed/Pressure Max Storm Surge Max Rainfall



Soil Moisture Air Temperature Forecast Uncertainty Other

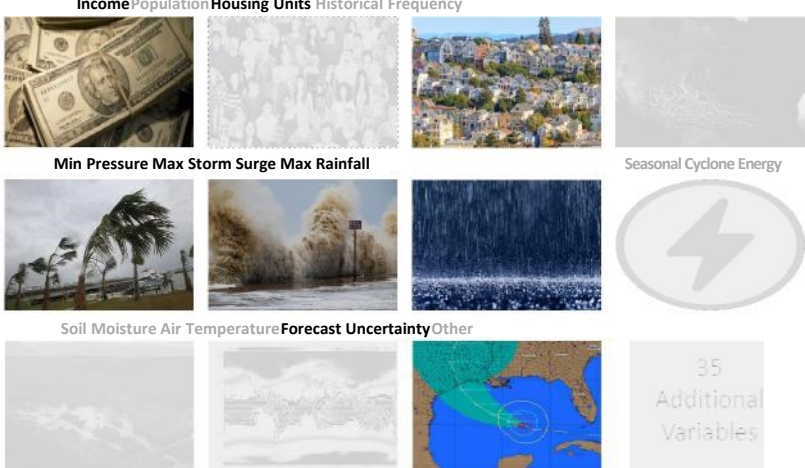


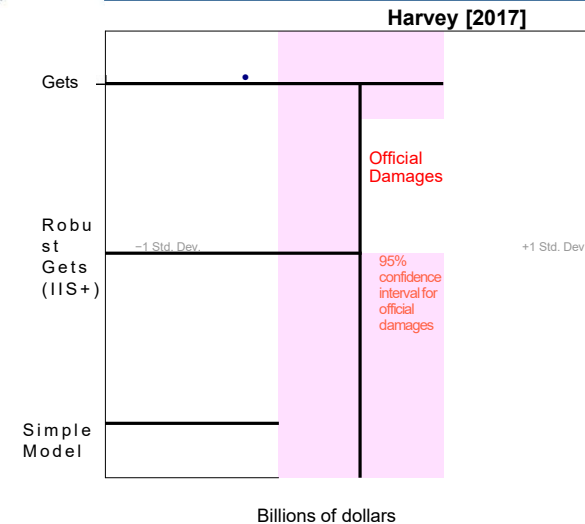
Seasonal Cyclone Energy



35 Additional Variables

Embed forecast uncertainty in a general model of hurricane damages and use *Autometrics* automatic model selection:

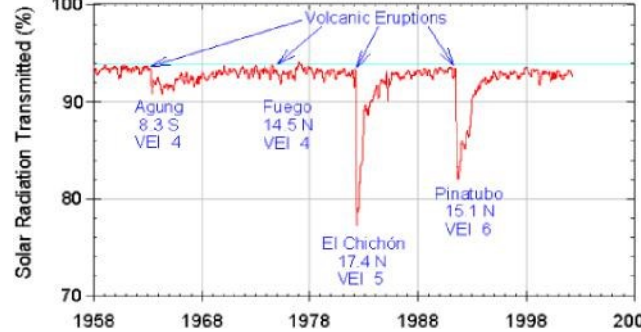




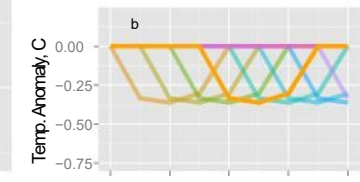
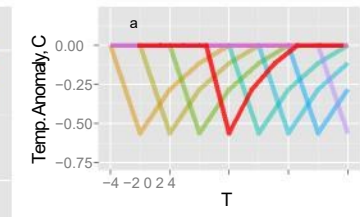
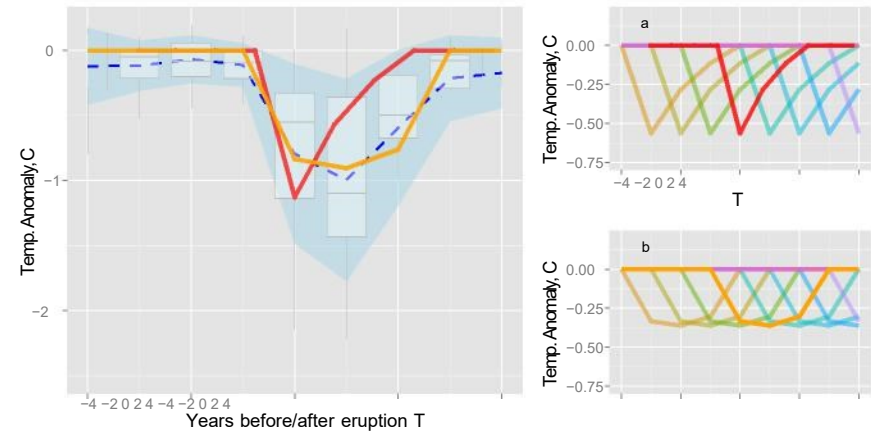
Green box shows calculation from simple damage model; pink shading likely range of damages; blue triangle is from our model with our uncertainty range.

**Eruptions create 'outliers' in temperature reconstructions.**

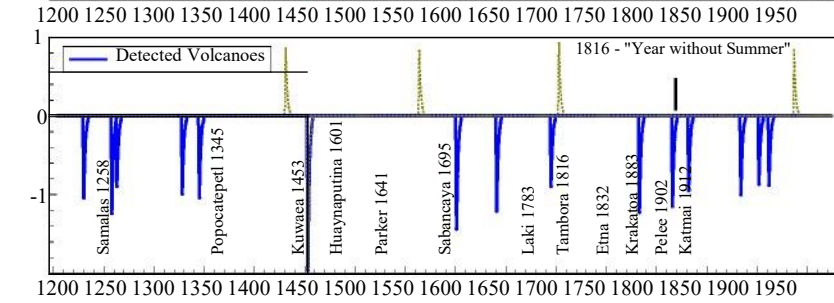
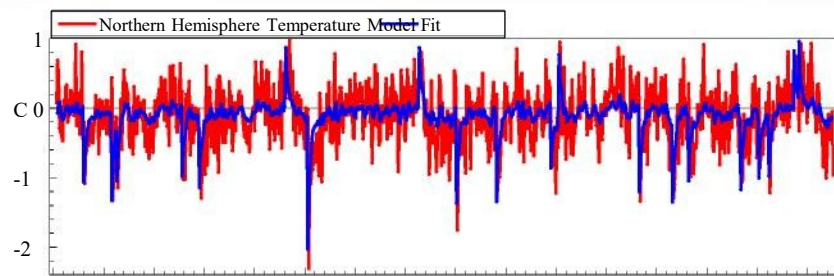
Mauna Loa Observatory Atmospheric Transmission



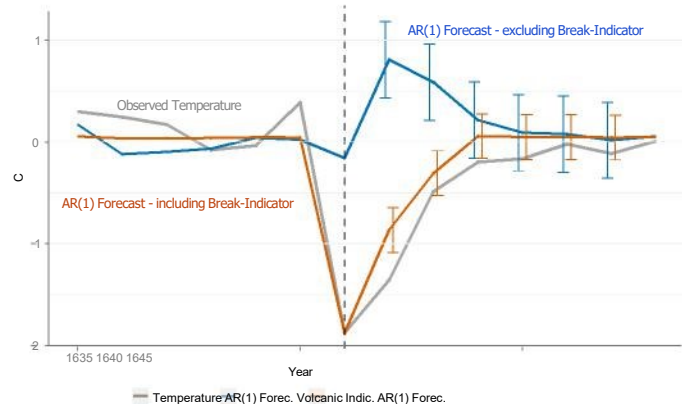
**Emissions block solar radiation reducing temperatures, but gradually get removed from the atmosphere. 'Shape' of that response is relatively standard.**



Design break indicators from physical-theory shape of  $v$ . Include as many indicators as observations (years here) & check which match eruptions: use *Autometrics* indicator saturation.

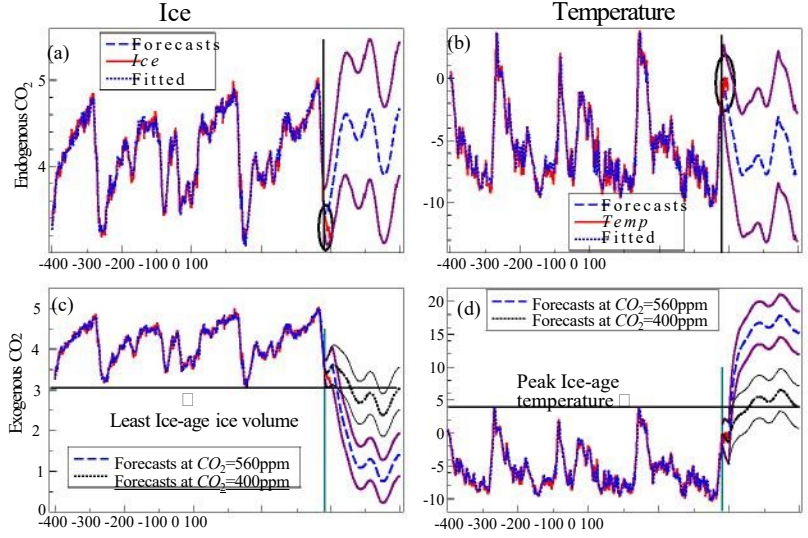


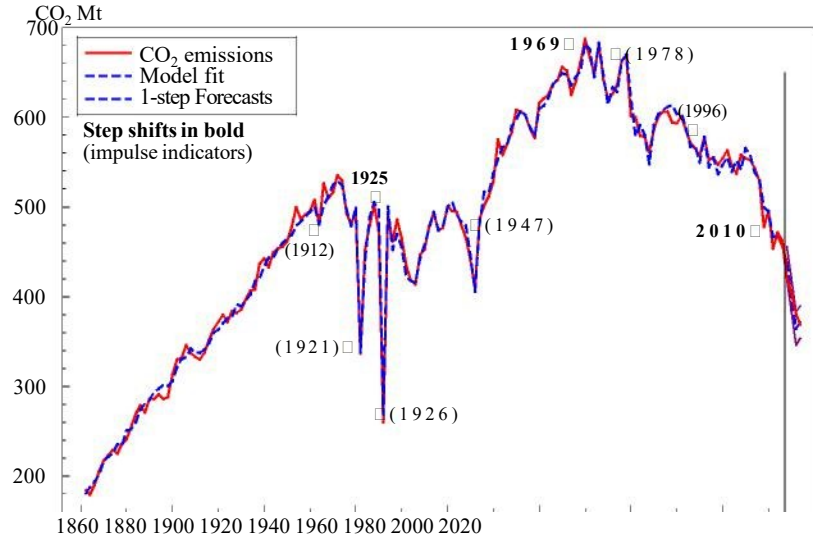
**Top Panel—model fit; lower Panel—volcanoes detected**



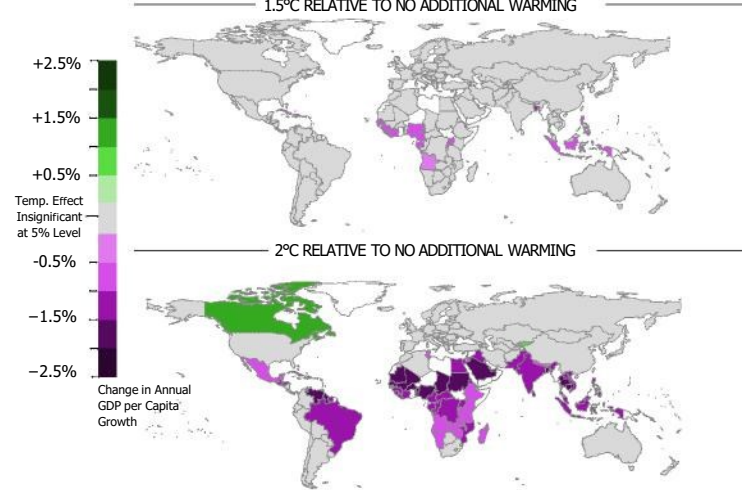
**Example eruption: 1641 Parker (Philippines)**  
**Forecast trajectory 6 steps ahead based on one observation.**

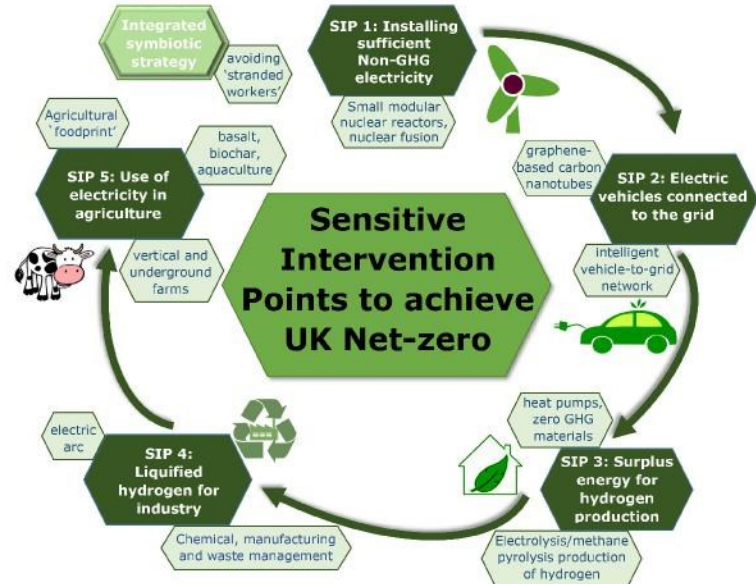






## Projected Median Change in Annual GDP per Capita Growth







**Statistically rigorous empirical analysis essential in guiding decision making.**

**Need robust evidence-based policies – our statistical methods and resulting models can provide that evidence base.**

**Exciting field, interdisciplinary, many questions still unanswered.**

**Keen to explore new datasets, collaborations, and research questions that are crucial to future of humanity.**



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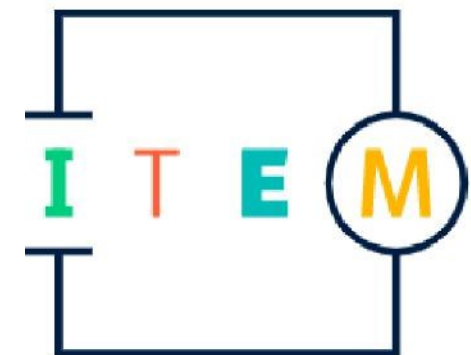
**Keen to explore new datasets, collaborations, and research questions that are crucial to future of humanity.**

**Thank you! <https://www.climateeconometrics.org/>**

# The Importance of Going Electric Equitably... and Openly

15 March 2023: 14:30-15:30

Dr Hannah Budnitz, Research Associate, Transport Studies Unit



INCLUSIVE  
TRANSITION TO  
ELECTRIC  
MOBILITY



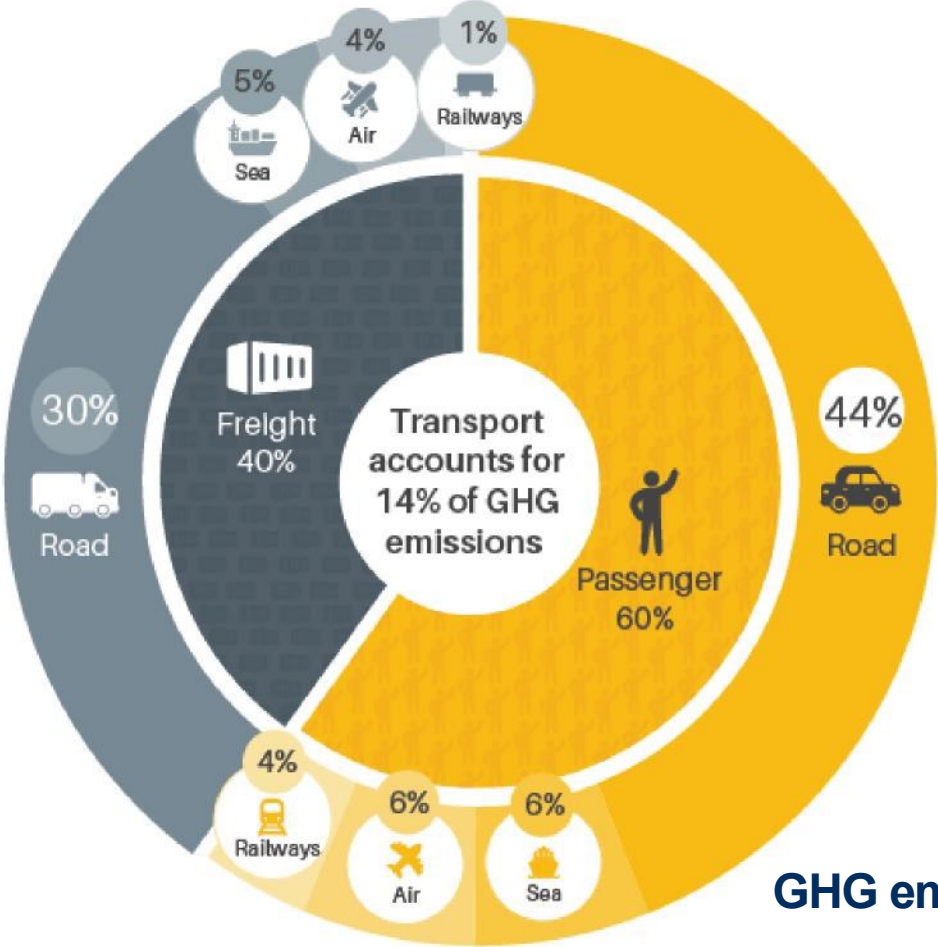
# My research

- Socio-technical transition to electric mobility
- Use and uptake of Electric Vehicles (EV), shared EVs, e-scooters...
- Preferences for and practices of public EV charging
- Governance and governmentality of electric mobility policies





# Climate-centred



**GHG emissions from transport, by mode, 2018**

Source: SLOCAT (2021)

# Our declaration

COP26

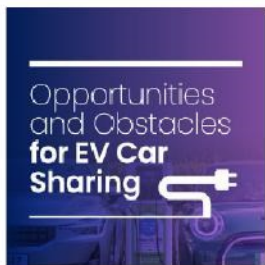
“ Together, we will work towards all sales of new cars and vans being zero emission globally by 2040, and by no later than 2035 in leading markets. ”

<https://www.gov.uk/government/publications/cop26-declaration-zero-emission-cars-and-vans/cop26-declaration-on-accelerating-the-transition-to-100-zero-emission-cars-and-vans>

**Uneven distribution (socially, spatially)...  
a temporary inequity?**

# Open practices



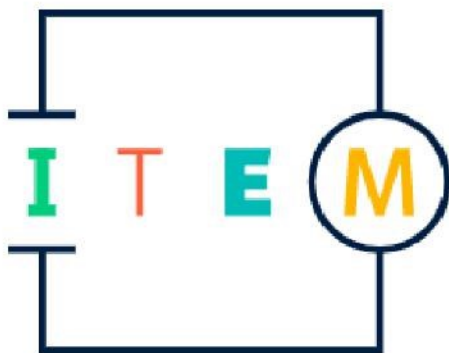


- Opportunities and Obstacles for EV Car Sharing

# Open policy...



- Enabling the acceleration of electric vehicle adoption - February 2022.
- Preferences for public electric vehicle charging - February 2022.
- Charging when parking - a social change of routine - February 2022.



## INCLUSIVE TRANSITION TO ELECTRIC MOBILITY



***Prof. Tim Schwanen***  
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Head of the Transport  
Studies Unit



***Paul Gambrell***  
Oxfordshire County Council,  
Team Leader EV Integration



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***Dr Hannah Budnitz***  
University of Oxford,  
Research Associate in  
Urban Mobility



***Prof. Malcolm McCulloch***  
University of Oxford,  
Head of the Energy and  
Power Group



ABOUT ITEM

FUNDING

NEWS AND EVENTS

RESULTS

...open publications

# Open Data and Open Research

- <https://github.com/EPGOxford/GECCO>
- Pre-print

SOC ARXIV SocArXiv Papers Submit a Paper

## Public Residential Charging of Electric Vehicles: an exploration of user preferences

AUTHORS  
Hannah Budnitz, Toon Meelen, Tim Schwanen

AUTHOR ASSERTIONS  
Conflict of Interest: No Public Data: No Preregistr



Page: 1 of 31 Automatic Zoom

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# Final thoughts

Climate change -> transformation not just transition in mobility

Inclusion, as well as innovation necessary to transformation

Tension between inclusion and acceleration of decarbonising mobility

Role of Open practices, policy and research in reducing that tension?

# Thank you!

[Hannah.Budnitz@ouce.ox.ac.uk](mailto:Hannah.Budnitz@ouce.ox.ac.uk)

@HBudnitz

<https://www.tsu.ox.ac.uk/pubs/policy-briefs.html>

[www.itemresearch.org](http://www.itemresearch.org)

# Closing remarks

## Questions?

Contact us: [openaccess@bodleian.ox.ac.uk](mailto:openaccess@bodleian.ox.ac.uk)  
<https://openaccess.ox.ac.uk/>

A feedback survey and link to recording and materials will follow.

**Thank you for attending.**