Smarter Household Energy Data: infrastructure for policy and planning

Louise Corti

UK Data Archive

University of Essex

UK Data Service

DataFirst

For the tweeters

#SmartEnergyData
@DataFirstATUCT
@ukdataservice

What is the UK Data Service?

- a comprehensive resource funded by the Economic and Social Research Council (ESRC)

- a single point of access to a wide range of secondary social science data

- support, training and guidance throughout the data life cycle

- listen to our recorded webinars at

  http://ukdataservice.ac.uk/news-and-events/videos.aspx
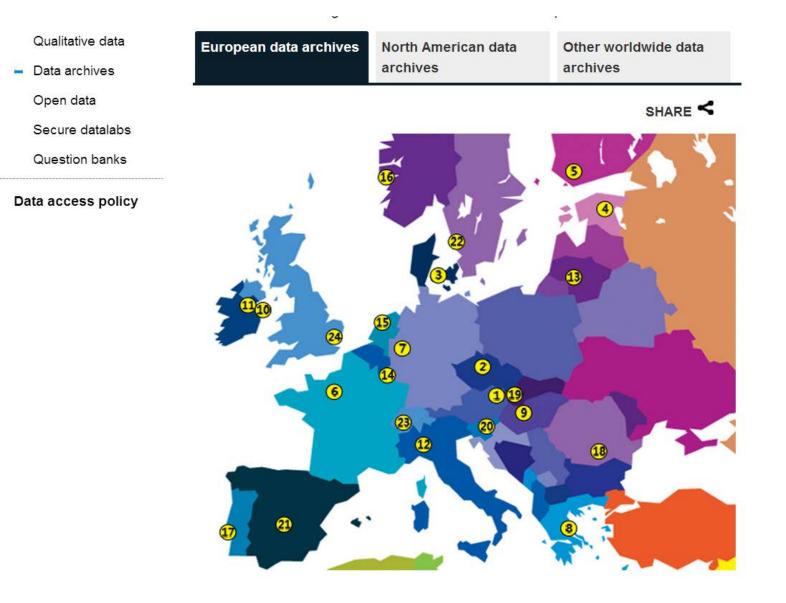
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What does the UK Data Service do?

- put together a collection of the most valuable data and enhance these over time

- preserve data in the long term for future research purposes

- make the data and documentation available for reuse

- provide data management advice for data creators

- provide support for users of the service

- information about how data are used

- easy access through website

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Data archives worldwide

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ESRC/NRF International Centre Partnerships Call 2015

ESRC and the NRF collaborative call for bringing together UK and South African researchers.

Joint ESRC /NRF International Centre Partnerships addressing the broad thematic areas:

- Higher Education
- Research Infrastructure
- Social Science of the Nexus
- Urban Transformations

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Proposal and partners

- Funded November 2015 for 18 months

- Partner Centres:

  - ESRC – UK Data Service

  - NRF – DataFirst, University of Cape Town

- Grant for limited staffing activities and KE activity

- Leveraged through integration with UK Data Service's own big data work

- Household energy data used as a use case for setting up and demonstrating transferrable big data infrastructure

- Engaging key players

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Aims and Outcomes

- Investigate and test platform/ tools for ingesting, quality assessing and exploiting large-scale data for social science research

- Household energy research used as test case

- Include secure data mashing/linking to create new non-disclosive data products

- Application for research with policy relevance

  - Exemplar use cases

  - Assessment of data needs for research

- Joint UK-ZA training course delivered to contribute to upskilling in 'big data' issue for social scientists

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Aligned projects

- UK Data Service experiments with linking smart energy data

    - Focus on applied projects from CEE, UCL

- South Africa projects via UCT Energy Research Centre

    - Research questions posed around environmental economics on costing, best energy tarif structures from the perspective of new development outcomes and encourage energy saving

    - Medical researchers working in a rural centre, an MRC/WITS Agincourt Health and Socio-demographic Surveillance System site near Kruger Park. Monitoring health and development outcomes since 1992, providing a long time series of data. Do they match energy provision, e.g. introduction of electification?

    - Municipal data from Cape Town including billing data and consumption.

Engaging reseachers/ users of data

- Opportunities to bring together researchers already engaged in household energy research using data

- Gather data challenges around household energy data - our role as national data access brokers

- Contribute real needs to the development of a big data platform and tools

- Present case studies of challenges around curation and access provision of energy data

- See our blog: https://ukdataservicesmartenergydata.wordpress.com

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Seeking your input

- Your own innovative uses of data

- Your own data challenges

- What are your ideas for scaling up to exploit big data opportunities?