



Changing Climates: Discourses around climate change in the British and Brazilian news media

Carmen Dayrell, Tony McEnery, John Urry

<http://cass.lancs.ac.uk>



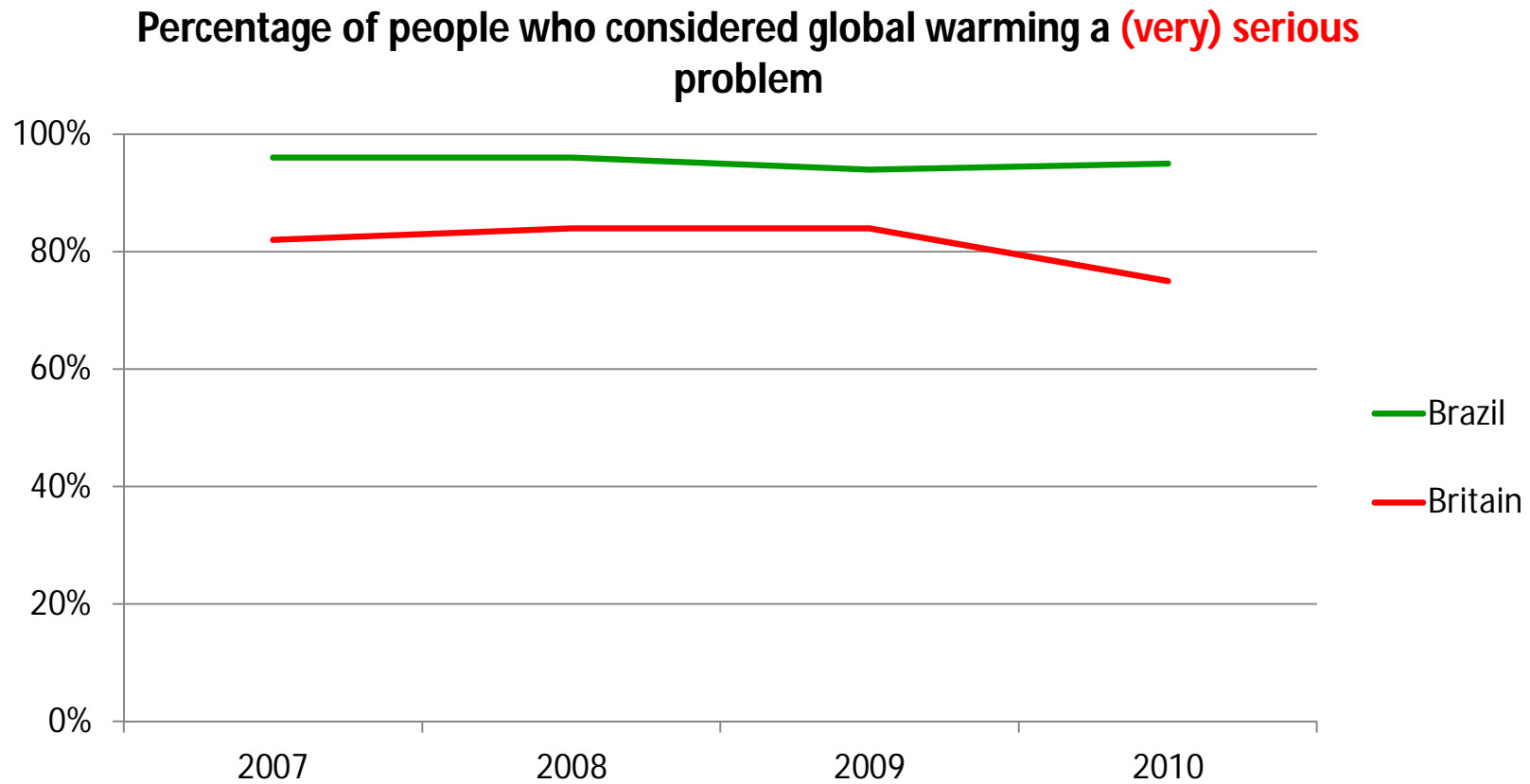
Why Brazil?

Britain

Brazil

- among the largest economies in the world
- major emitters of greenhouse gases
- significant measures to curb emissions
- major players in international debates on global warming

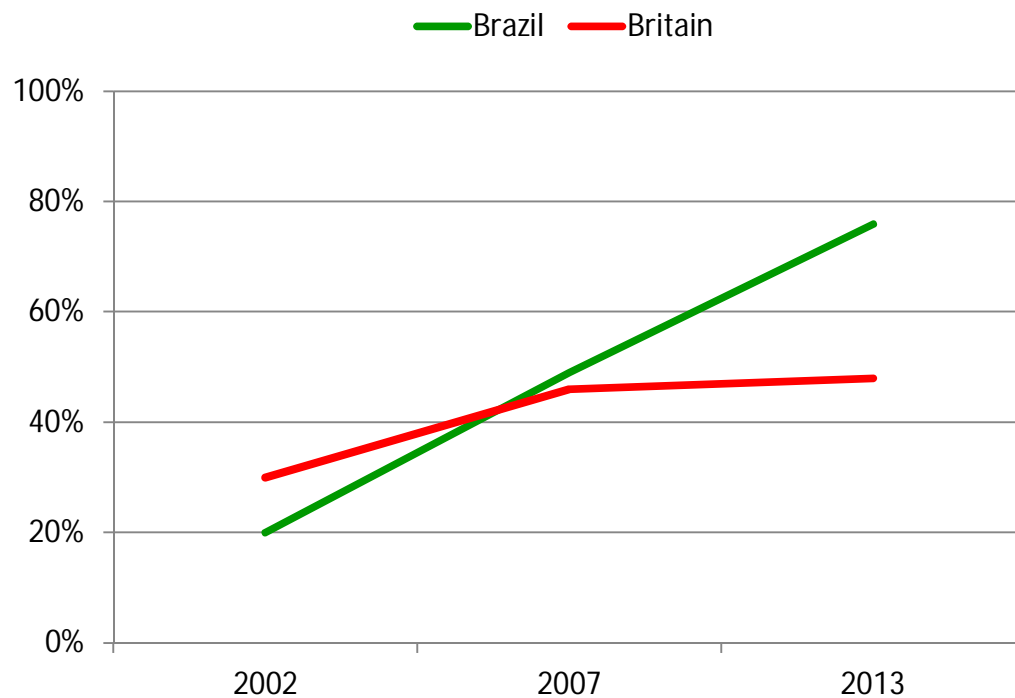
Public Opinion



Source: PEW (2009, 2010)

Public Opinion

Percentage of people who regard environmental problems as a **major global threat**



Source : PEW (2007, 2013)

- Climate change
- International financial instability
- US power and influence
- North Korea's nuclear program
- Iran's nuclear program
- Islamic extremist groups

Dayrell and Urry (2015)

Article



Mediating climate politics: The surprising case of Brazil

European Journal of Social Theory

1–17

© The Author(s) 2015



Reprints and permission:

sagepub.co.uk/journalsPermissions.nav

DOI: 10.1177/1368431015579962

est.sagepub.com



Carmen Dayrell

*ERSC Centre for Corpus Approaches to Social Science (CASS),
Lancaster University, UK*

John Urry

Lancaster University, UK

Abstract

This article examines the centrality of Brazil within the future of climate policy and politics. The state of the carbon sink of the Amazon rainforest has long been an iconic marker of the condition of the Earth. Brazil has been innovative in developing many non-carbon forms of energy generation and use and it has played a major role in international debates on global warming since the Rio Earth Summit in 1992. We examine various ways in which climate change has come to be centrally important in Brazilian public opinion. Survey evidence shows that Brazilians are the most concerned about issues of climate change – with less climate change scepticism as compared with more ‘advanced’ societies. Through using techniques of corpus linguistics we examine how Brazilian media has engendered and stabilized such a high and striking level of climate change concern. We show that the media helped to fix a ‘climate change framing’ of recent often strange weather. The article analyses the newly constructed Brazilian Corpus on Climate Change, presenting data on a scale and reach that is unique in this area of research.

OBJECTIVES

1. **What concerns about global warming are revealed through talk and text in Brazil and Britain?**
2. **How has climate change has been framed within large data sets in major newspapers in Brazil and Britain in the past decade (2003-2013)?**
3. **Does the Brazilian data show high levels of concern about climate change? Does the data explain how and why Brazilians are so concerned with climate change?**
4. **To what degree are the three main frameworks for responding to climate change, catastrophism, gradualism and scepticism, revealed in this corpus?**
5. **What kinds of social practices do people discuss in relation to the causes and ways to mitigate climate change?**

Brazilian Newspapers

19,268 texts (10.9 Million words)

Broadsheet papers
Folha de São Paulo
O Globo
Estado de São Paulo
Jornal da Tarde
Gazeta do Povo
Zero Hora
Diário Catarinense
Pioneiro
Estado de Minas
Correio Braziliense
Diário de Pernambuco
Correio

British Newspapers

85,925 texts (61.8 Million words)



Broadsheet	The Times	The Sunday Times
	The Guardian	The Observer
	The Daily Telegraph	The Sunday Telegraph
	The Independent	Independent on Sunday
	The Herald	Sunday Herald
	The Scotsman	Scotland on Sunday

Query words/phrases (Gabrielatos 2007)

CASS

Corpus Approaches
to Social Science

British Newspapers

- *climate change*
- *global warming*
- *greenhouse gas(es)*
- *carbon emissions*
- *carbon reduction*
- *carbon cuts*
- *greenhouse initiative*
- *carbon trading*
- *renewable(s)*

Brazilian Newspapers

- *mudança(s) climática(s), mudança(s) do clima*
- *aquecimento global*
- *gases-estufa, gases de/do efeito estufa*
- *emissões de carbono, emissões de CO₂, emissões/emissão de dióxido de carbono*
- *redução das emissões, reduzir (as) emissões*
- *emissões globais*
- *IPCC*
- *UNFCCC*
- *Conferência/Convenção do Clima*
- *Protocolo de Kyoto/Kioto/Quioto*
- *temperatura global*

Corpus Linguistics Methods

- Keyword analysis
 - ⇒ words which are unusually frequent, or infrequent, in one corpus compared to another corpus
- Collocational Analysis
 - ⇒ surrounding context of a given word
- Closer reading of concordance lines

Top Keywords in British Newspapers in 2007

climate
pound
carbon
emission
warming
say
mr
energy
Blair
change
global

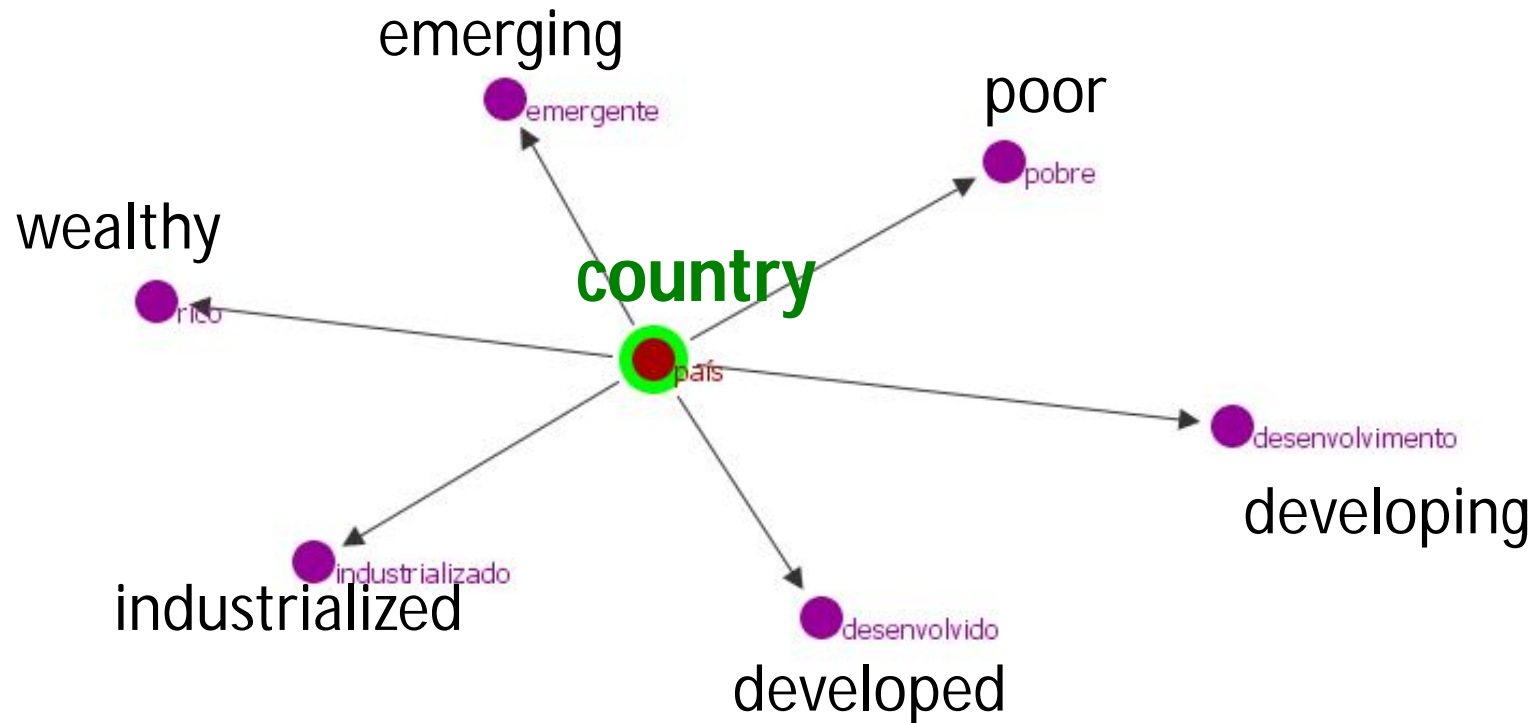
Mentions of the *IPCC* in 2007

Occurrences of IPCC in 2007	British Newspapers	Brazilian Newspapers
% of texts containing IPCC	2%	17%

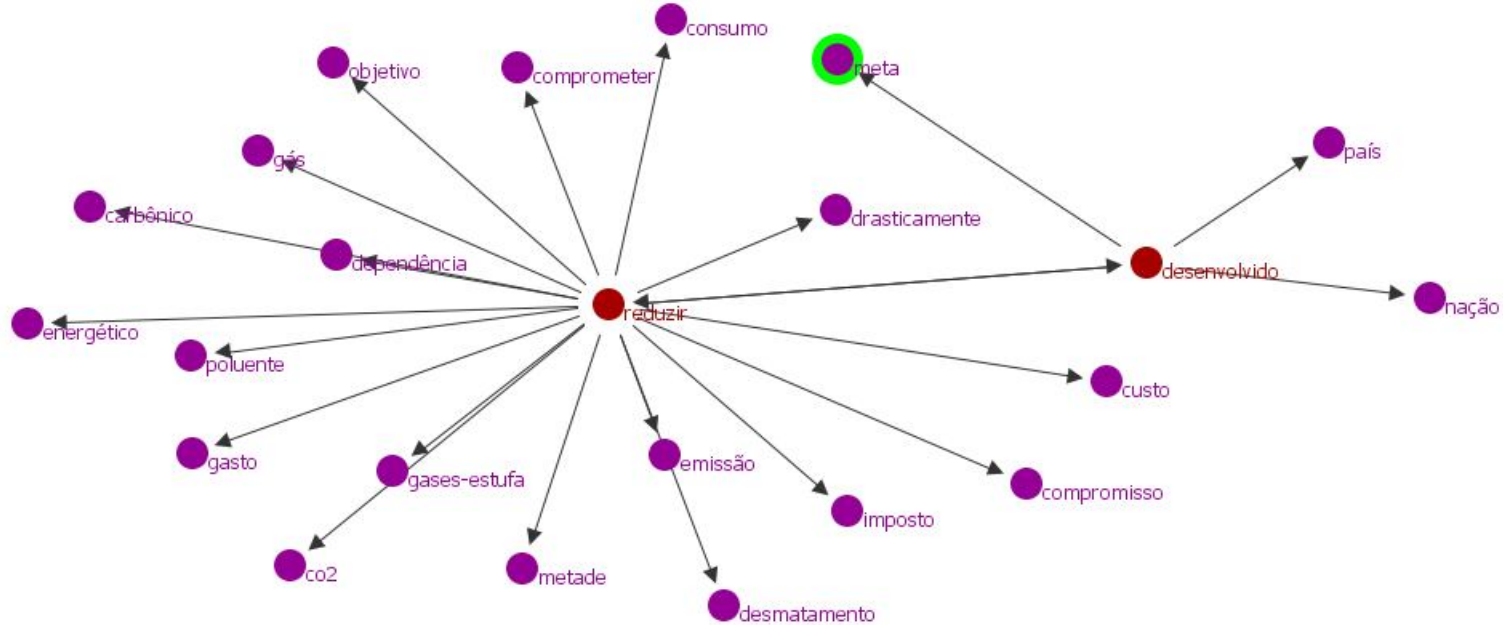
Mentions of the *IPCC* in 2007

Occurrences of IPCC in 2007	British Newspapers	Brazilian Newspapers
% of texts containing IPCC	2%	17%
Frequency per 100,000 words	7	59

Brazilian newspapers frequently discuss the position of developed and developing countries



What do Brazilian newspapers say about developed countries?



Both should take action

O fato é que, hoje, 50% das emissões se originam em países em desenvolvimento. Mesmo que os países industrializados reduzissem a zero suas emissões, o problema não seria resolvido.

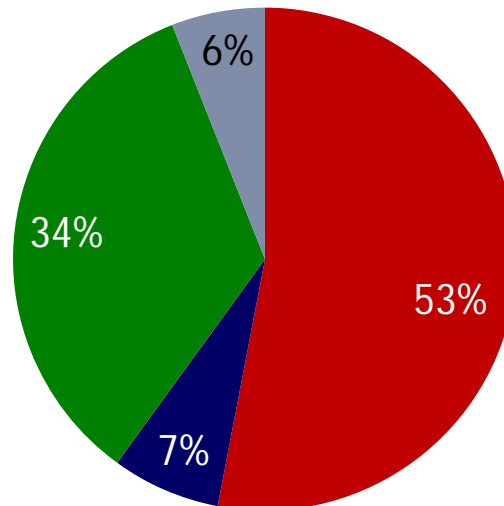
Estado de São Paulo - 20 April 2009

The fact is that, today, 50% of all emissions come from developing countries. Even if industrialized countries reduce their emissions to zero, **the problem would not be solved.**

Brazilians' opinion

Which countries are to blame for global warming?

- rich countries
- poor countries
- both
- Don't know/ Refuse to answer

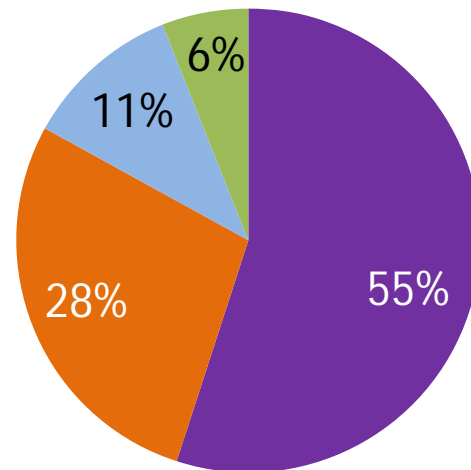


Source: CNI-IBOPE (2012)

Brazilians' opinion

Which countries should take action to fight global warming ?

- both equally
- both should work together but rich countries should do more
- rich countries only
- Don't know/ Refuse to answer



Source: CNI-IBOPE (2012)

Consequences of Climate Change are frequently discussed in **Brazilian newspapers**

- Melting of the Greenland and Antarctic icefields
 - ⇒ *Artic and ice co-occurring with melt, melting, ocean*

Arctic icefields are melting

Modelos climáticos indicam que o gelo no Ártico pode desaparecer completamente no verão a partir do meio do século por causa do aquecimento global.

Folha de São Paulo - 22 Agosto 2007

Climate models indicate that the **Arctic ice** may disappear completely in the summer from 2050 onwards, due to **global warming**.

Consequences of Climate Change are frequently discussed in **Brazilian newspapers**

- Melting of the Greenland and Antarctic icefields
 - ⇒ *Arctic and ice co-occurring with melt, melting, ocean*
- Impact of ecosystems and biodiversity
 - ⇒ *ecosystem and biodiversity co-occurring with loss, impact*
- Increased frequency of 'natural' disasters
 - ⇒ *hurricane, tsunami, even earthquake co-occurring with more, frequent, strong*

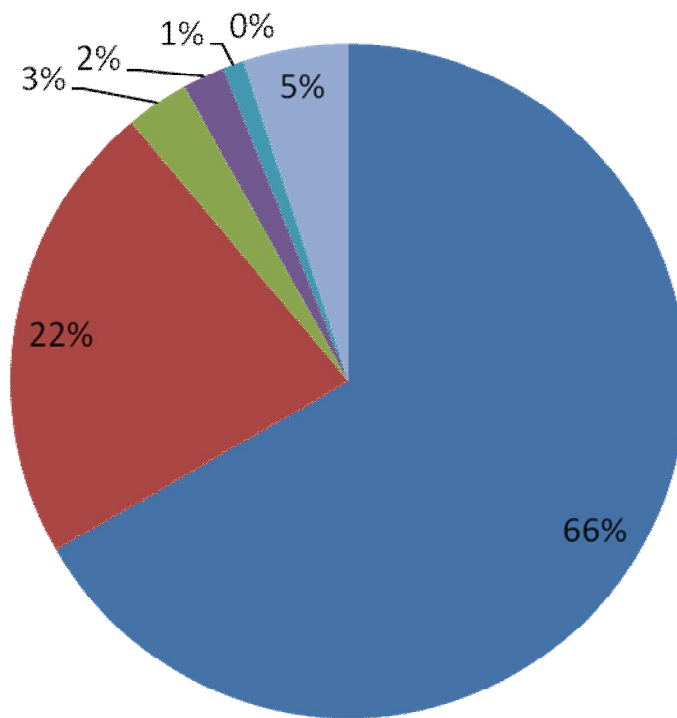
Consequences of Climate Change are frequently discussed in **Brazilian newspapers**

A sequência não é boa. Dilúvio no Brasil. Terremoto no Haiti. Calor de 8°C no Ártico. Nevasca nos Estados Unidos. Enchente em Buenos Aires. Tempestade na França. Outro terremoto, no Chile.

English translation: The sequence is not good. Floods in Brazil. Earthquake in Haiti. Temperature around 8°C in the Arctic. Blizzard in the United States. Flood in Buenos Aires. Storm in France. Another earthquake in Chile.

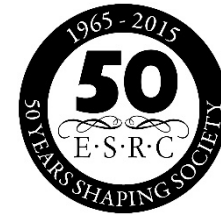
Estado de São Paulo, 7 March 2010

Brazilians' discourse as to the urgency of the problem (CNI-IBOPE 2012)



- Current problem that requires immediate actions
- Problem to occur in a near future but actions should be taken now
- Problem to occur in a near future but actions can wait
- Problem to occur in a distant future but actions should be taken now
- Problem to occur in a distant future but actions can wait
- Not a problem
- Don't know/ Refuse to answer

Britain



<http://cass.lancs.ac.uk>



Energy in British newspapers

Keywords	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
energy				✓		✓	✓		✓		✓
electricity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
nuclear		✓	✓	✓	✓	✓	✓		✓	✓	✓
renewable	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
renewables	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
turbine	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
offshore							✓	✓	✓	✓	✓
wind									✓	✓	✓
onshore										✓	✓
farm											✓
solar									✓		
fracking											✓
shale										✓	✓
gas										✓	✓

Wind

- is why are these **wind turbine companies** being treated differently?
- sending Scottish **wind farm companies** and the SNP a
- beyond 2020 meant **wind industry companies** did not h
- overnment to the **wind** generating **companies** for hav
- have is **onshore wind**, which has problems of its o
- threat from huge **wind turbines** and electricity py
- largest **offshore wind farms** will be built in the T
- a major move into **offshore wind** manufacturing that
- ... have criticised **wind power** to speak at our Onshor
- anomaly arising from the ... system for **wind energy**.
- expensive and intermittent **offshore wind** sources represents a big gamble
- we need energy and **wind farms** but I cannot see the logic of this

Wind

- is why are these **wind turbine companies** being treated differently?
- sending Scottish **wind farm companies** and the SNP a
- beyond 2020 meant **wind industry companies** did not h
- overnment to the **wind** generating **companies** for hav
- have is **onshore wind**, which has **problems** of its o
- **threat** from huge **wind turbines** and electricity py
- largest **offshore wind farms** will be built in the T
- a major move into **offshore wind** manufacturing that
- ... have **criticised wind power** to speak at our Onshor
- **anomaly** arising from the ... system for **wind energy**.
- **expensive and intermittent offshore wind** sources represents a big **gamble**
- we need energy and **wind farms** but I **cannot see the logic of this**

££££ in British newspapers

Keywords	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
bn	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
pound	✓	✓	✓	✓	✓	✓	✓				
GBP				✓	✓	✓	✓		✓		
soar						✓					
crunch						✓					
recession							✓				
deficit								✓			
spending								✓			
subsidy								✓	✓	✓	✓
treasury								✓	✓	✓	✓
tariff									✓		
freeze											✓
levy											✓



Energy in Brazil

<http://cass.lancs.ac.uk>

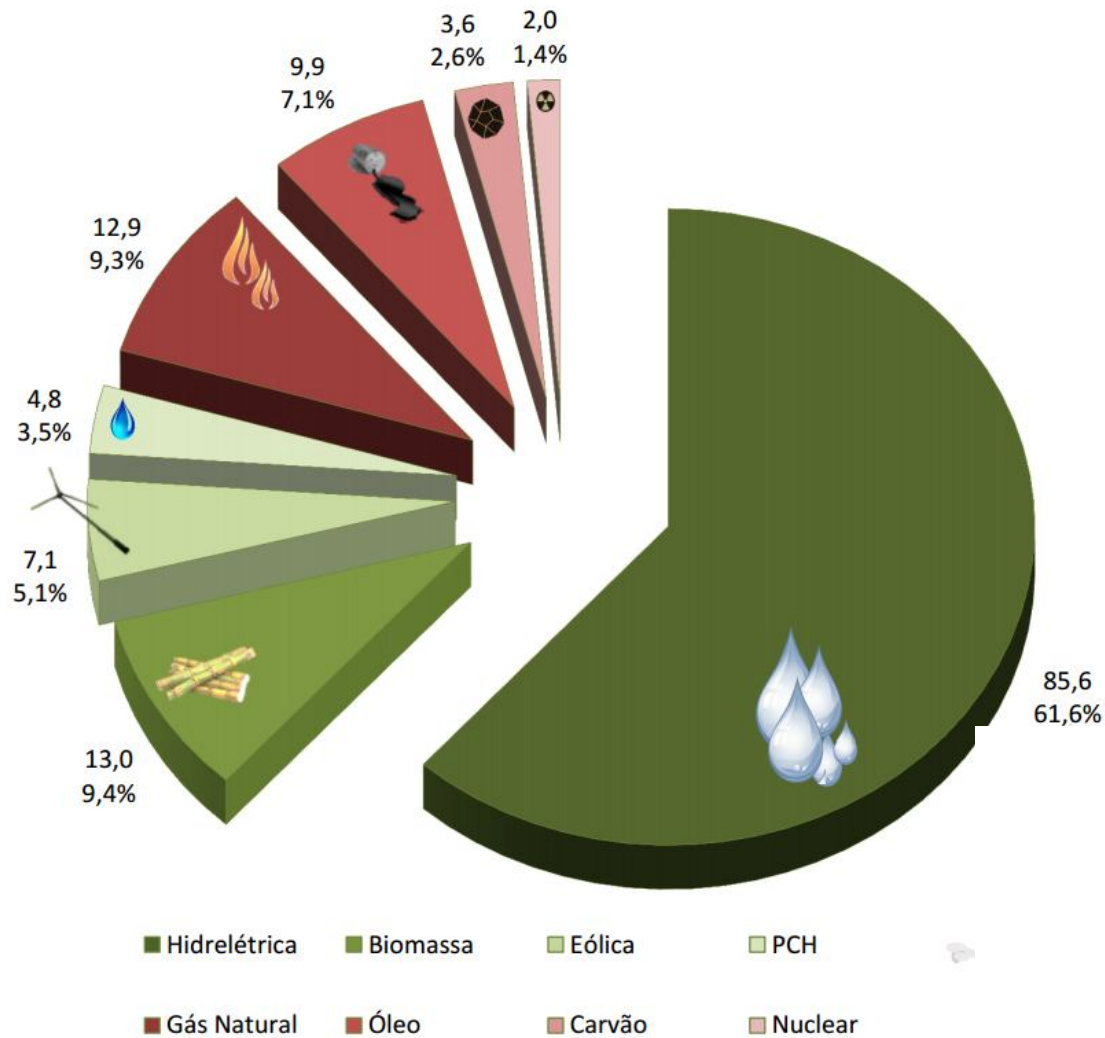


Energy in Brazilian newspapers

Keywords	Translation	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
energético	energy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
renovável	renewable		✓	✓		✓	✓	✓	✓	✓	✓	✓
hidrelétrico	hydropower					✓	✓	✓	✓	✓	✓	✓
hídrico	hydric					✓		✓				
MW	MW					✓		✓				
reservatório	reservoir										✓	
eólico	wind (power)					✓		✓	✓	✓	✓	✓
biomassa	biomass							✓	✓			
carvão	coal					✓	✓	✓		✓	✓	✓
térmico	thermal					✓		✓	✓			✓
termelétrico	thermoelectric								✓			

Electricity generation in Brazil

Source: ABEE (Sep 2015)



Next Steps ...

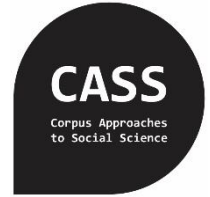
British Tabloids

21,072 texts (9.8 Million words)

Tabloids	The Express	The Sunday Express
	The Daily Mail	Mail on Sunday
	The Sun	Sunday Sun
	The Daily Mirror	Sunday Mirror
	The Daily Star	Daily Star Sunday
	The Daily Record	Sunday Mail

Germany

Italy



Thank you!
Obrigada!

References

- BAKER, P., C. GABRIELATOS, T. MCENERY (2013) *Discourse analysis and media attitudes: the representation of Islam in the British press*. Cambridge University Press.
- BAKER, P. and E. LEVON (2015) 'Picking the right cherries? A comparison of corpus-based and qualitative analyses of news articles about masculinity'. *Discourse & Communication* 9(2):221-36.
- DAYRELL, C. and J. URRY (2013) *Changing Climate and Society. The Surprising Case of Brazil*. CASS Working paper
- DAYRELL, C. and J. Urry (2015) 'Mediating climate politics: The surprising case of Brazil'. *European Journal of Social Theory*, Special Issue on Climate Change, 3 (18): 257-73
- CNI-IBOPE (2012) *Pesquisa CNI-Ibope. Retratos da sociedade brasileira: Meio ambiente*. Available at: http://arquivos.portaldaindustria.com.br/app/conteudo_24/2012/07/09/80/20120828024710449864e.pdf (accessed 04 July 2014).
- PEW (2007) 2007 Pew Global Attitudes Report. Global unease with major world powers. Rising environmental concern in 47-nation survey. Available at: <http://www.pewglobal.org/2007/06/27/global-unease-with-major-world-powers/>
- PEW (2013) Climate change and financial instability seen as top global threats. Survey report. Available at: <http://www.pewglobal.org/2013/06/24/climate-change-and-financial-instability-seen-as-top-global-threats/>
- URRY J. (2011) *Climate Change and Society*. Cambridge: Polity Press.