Cambio Climático e Transición Enerxética

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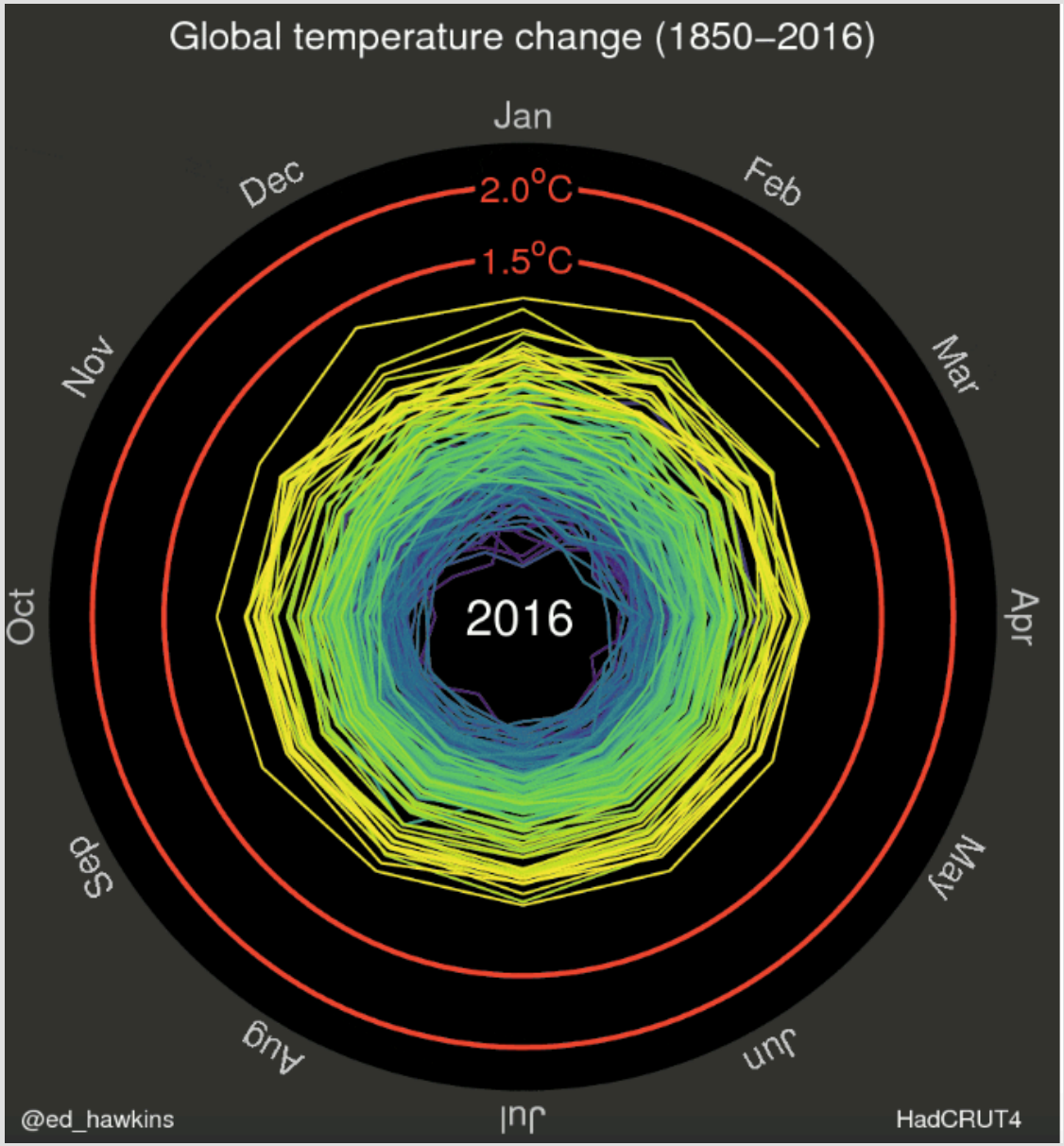
Contidos

- Cambio climático: rudimentos
- Política climática e administracións subcentrais
- Eficiencia enerxética e mitigación...
- en Galicia e España
- Algunhas propostas desde a investigación


Global temperature change (1850–2016)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2.0°C
1.5°C
2016
@ed_hawkins
HadCRUT4

Cambio climático: rudimentos

- Problema global
- Compoñente temporal
- Stock e non fluxo
- Mitigación e adaptación
- Mudanza a grande escala (transición)

Un problema relevante para Galicia

- **Vulnerabilidades: sector primario e +**
- **Obxectivos ambiciosos de mitigación**
  - Acordo de París >> obxectivos EU (2020, 2030, 2050)
- **Necesidade de adaptación**
- **Pero con oportunidades "á Stern"**
  - Novas actividades económicas
  - Mellora no benestar social

Política climática: visión ampla

- **A loita contra o cambio climático e os ODS: 1.5ºC?**
- **Non unha política ambiental máis**
  - Unha transformación radical: 'horizontalidade'
  - Eficiencia e equidade na transición
- **A importancia dos prezos (mercados e impostos de carbono)**
  - Solución coste-efectiva
  - Marco para a innovación e transformación
- **Accións galegas como parte da política climática europea**
  - Consecución de obxectivos
  - Reforzo e extensión de instrumentos

ipcc

INTERGOVERNMENTAL PANEL ON climate change

Working Group III – Mitigation of Climate Change

Chapter 15

National and Sub-national Policies and Institutions

As políticas climáticas subcentrais

- **Imprescindibles: cidades con 2/3 de emisións de GEI**
- **Crecentes: AR5 IPCC**
- **Mitigación**
  - Facilitar o labor dos prezos: planeamento, transporte público
  - Completar os prezos cando existan outros fallos de mercado
  - Atención ás interaccións negativas: impostos sobre renovables, etc.
  - Facilitar a transición (aspectos distributivos)
- **Adaptación (coñecemento local, apropiabilidade)**
  - Políticas públicas infraestruturais
  - Promoción da adaptación autónoma

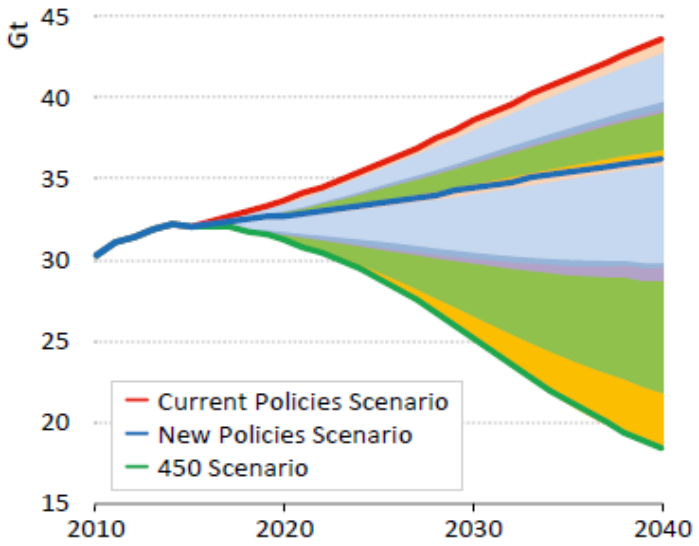
Prioridades na mitigación en Galicia

- **Renovables**
  - Grandes capacidades: eólica, solar, mariña
  - Sinerxias coa especialización industrial existente
- **Eficiencia enerxética**
  - Grandes potenciais desaproveitados
  - Crucial na transición
  - Posibilidade de complementar e reforzar actuacións doutras administracións
- **Relacións con adaptación**

Eficiencia enerxética e mitigación

- Por qué? Clima e outros obxectivos
- Non un fin en si mesmo
- Complexidade: barreiras e diferenzas
  - "Energy Efficiency Gap"
  - Disparidades sectoriais e territoriais

Figure 7.8 ▷ World energy-related CO_2 emissions abatement by scenario

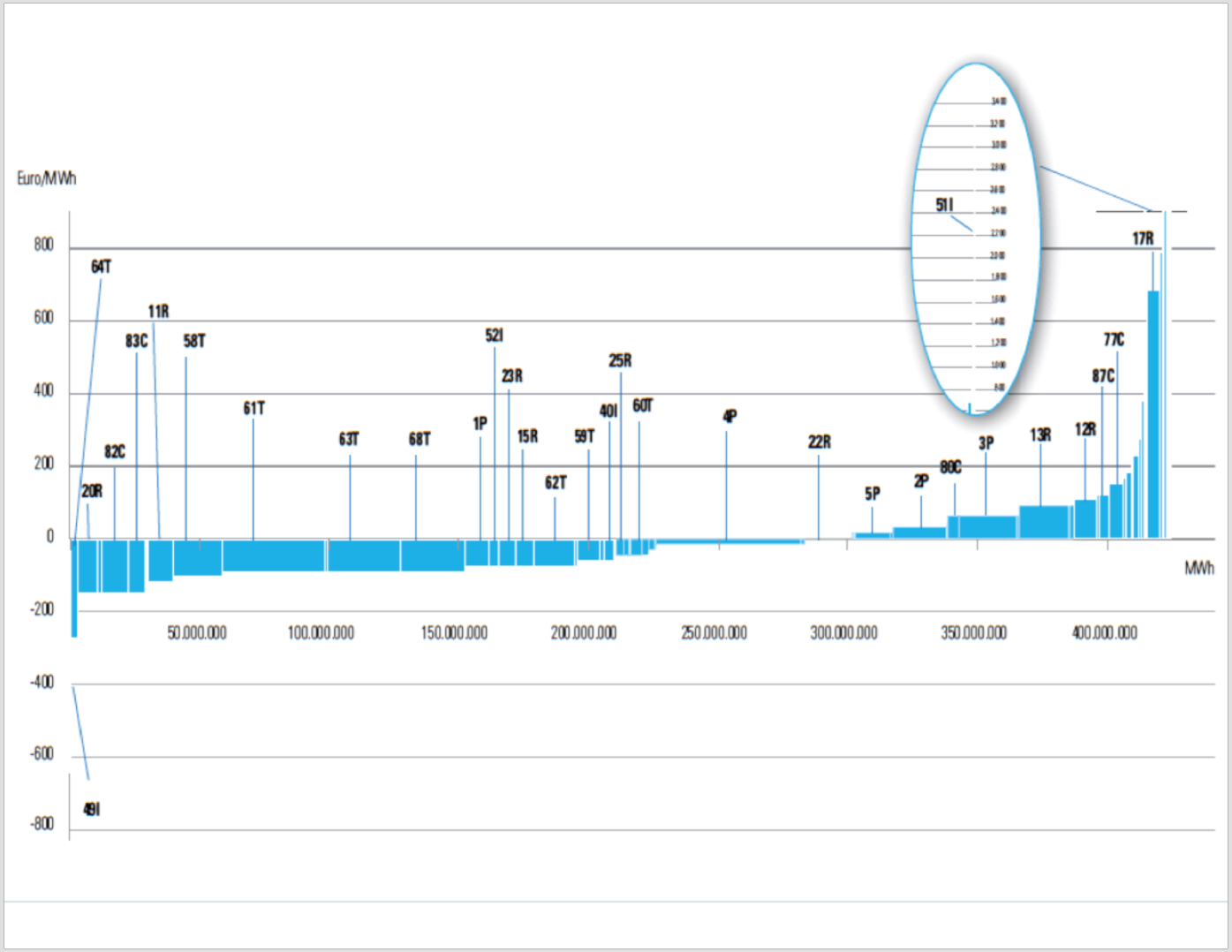


CO_2 abatement in 2040	CPS to NPS	NPS to 450
Activity effect	12%	2%
End-use efficiency	39%	33%
Supply efficiency	6%	2%
Fuel and technology switching	3%	4%
Renewables	32%	39%
Nuclear and CCS	9%	19%
Total (Gt CO_2)	**7.4**	**17.9**

Energy efficiency is a key abatement measure in the New Policies and the 450 Scenario

Notes: CPS = Current Policies Scenario; NPS = New Policies Scenario; CCS = carbon capture and storage.

World Energy Outlook (IEA)



Economics for Energy (2012)

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Energy

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The region matters: A comparative analysis of regional energy efficiency in Spain

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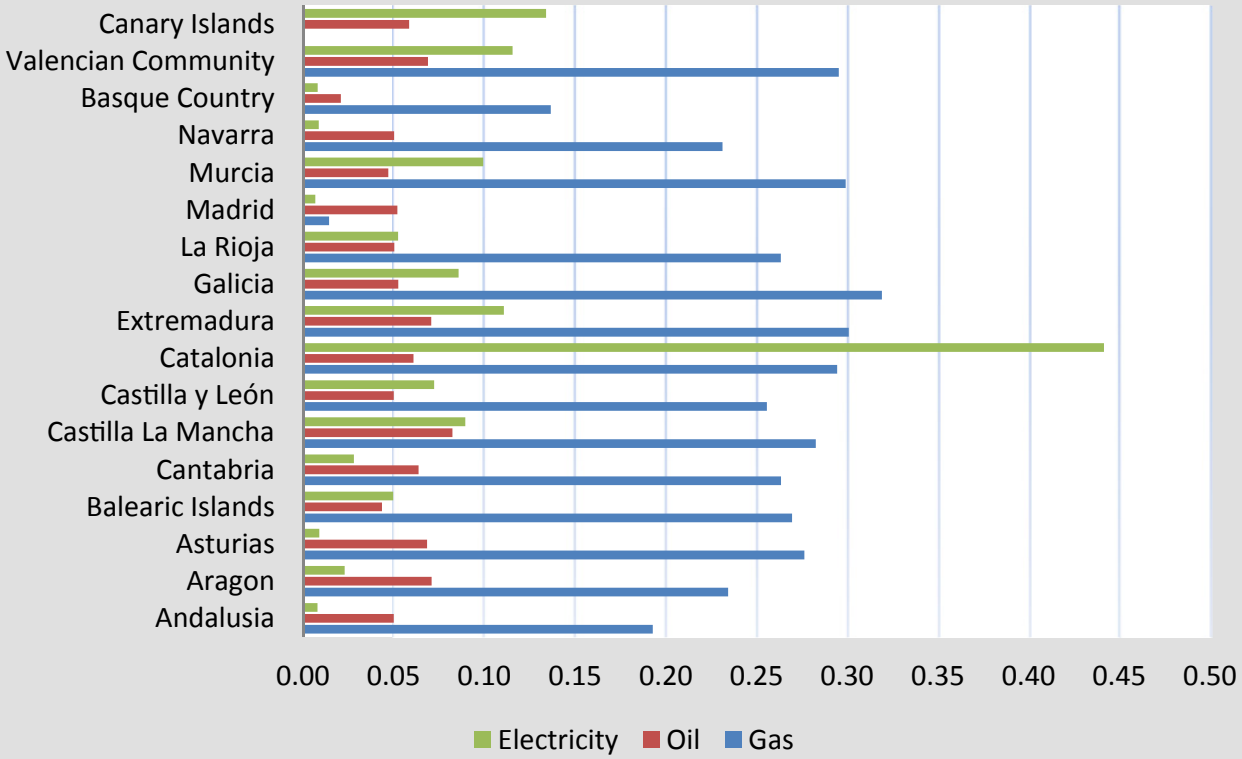
ABSTRACT

Owing to its strategic nature, the Spanish energy policy is primarily the responsibility of the central state. In spite of this, the Spanish legal code does in fact also confer certain powers to territorial governments in Spain, the Autonomous Communities. The objective of this work is specifically to investigate the differences between the energy performance of Spanish regions, which may be a consequence of specific features of their productive structures and resource endowments, in addition to the specific decisions adopted by each of them within the scope for action that they have in this area. With this aim in mind, we intend to calculate the inefficiency levels of Spanish regions as regards their use of various energy sources during the period 2003–2008, by estimating an environmental directional distance function. The results obtained confirm the existence of significant differences in the behaviour and evolution of regional energy efficiency and point to the need to pay more attention to energy planning in this territorial sphere.



Graph 1. Levels of energy inefficiency per energy source.

Source: Own elaboration

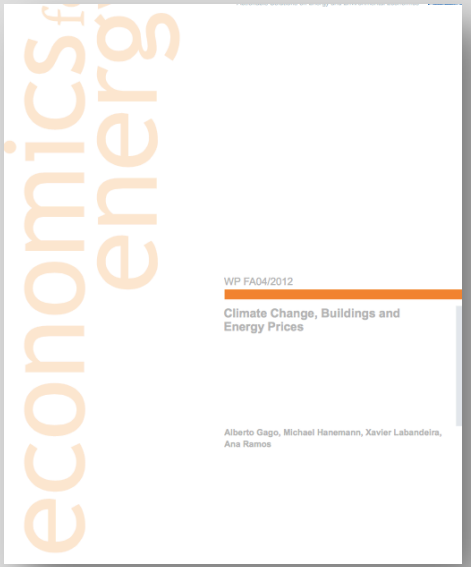
Ruiz Fuensanta (2015)

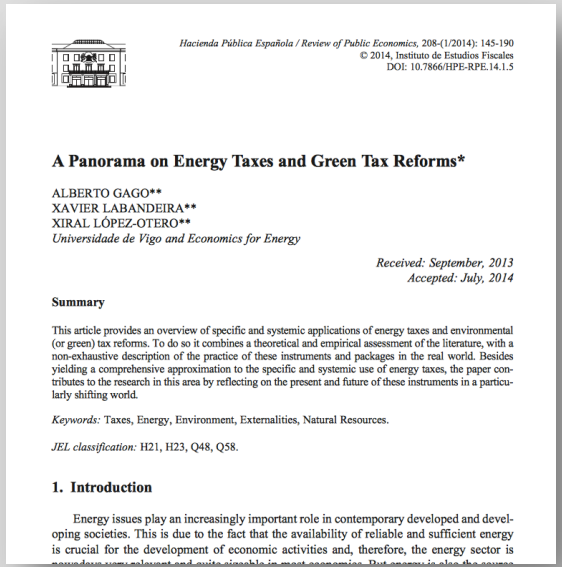
Escenarios para o sector enerxético español 2030-2050

- (Economics for Energy)

Novos impostos para a transición

- (con Alberto Gago, *Rede-UV*)
- **Un imposto local sobre as vivendas ineficientes enerxéticas**
- **A nova imposición do transporte**
- **Novas reformas fiscais verdes**





O papel da información

- (con Ana Ramos, Alberto Gago e Pedro Linares)

ELSEVIER

Energy Economics

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The role of information for energy efficiency in the residential sector

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Abstract

In spite of the large potential and existing efforts to foster energy efficiency in the residential sector, much remains to be achieved. This may be partially due to the many barriers and market failures faced by energy efficiency, which are even greater in this sector. In particular, informational failures seem to be pervasive and relevant in this area. Addressing these issues requires specific policy instruments and strategies. This paper reviews the empirical evidence on the effectiveness of such instruments, focusing on energy certificates, feedback programs, and energy audits. Results show that energy certificates and feedback programs can be effective, but only if they are carefully designed, whereas the evidence about the effectiveness of energy audits is mixed. In addition, the paper points out the large potential for new instruments as well as combinations of existing ones.

Eficiencia enerxética no sector comercial

- (con María Loureiro, *USC*)
- **Cómo complementar ás novas tecnoloxías con información?**
- **Experimento de ciencias sociais con Inditex**

Conclusións

- Un problema relevante para Galicia
- Unha política galega eficiente dentro do marco europeo
- Énfase en adaptación e subsidiaridade na mitigación
- Eficiencia enerxética: información, paquetes de política
- O papel do mundo académico

Grazas

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