

ICE

MINISTERIO DE ECONOMÍA Y COMPETITIVIDAD INFORMACIÓN COMERCIAL ESPAÑOLA Secretaría de Estado de Comercio

ECONOMY AND CLIMATE CHANGE: CHALLENGE AND OPPORTUNITY

Foreword			
The European policy against climate change.			
The new 2030 framework on climate and energy	3	S	
Miguel Arias Cañete			
Introduction	13	T	
José López-Tafall Bascuñana			
What is climate change and how to fight it	19	N	
Juan Cervigón Simo and José López-Tafall Bascuñana			
Governance, integration and securitisation of climate change	33	E	
Gonzalo Escribano Francés and Lara Lázaro Touza			
Climate change to dynamise activities of Spanish companies abroad.		T	
Available opportunities	49		
Isaac Martín Barbero and Jorge Alvar Villegas			
The impact of climate change on the financial and insurance sector	59	N	
Sergio Álvarez Camiña, Alfonso Nájera Ibáñez and Francisco Espejo Gil			
Spain before climate change. Challenges in the transition to a low carbon economy	73	O	
M ^a Luz Castilla Porquet and Franck van Dellen		C	
The role of renewable energies against climate change.			
A review of the available options			87
José Miguel Villarig Tomás			
The infrastructure sector, a huge ally in combating climate change			103
Julián Núñez Sánchez			
ECONOMIC FORUM			
Barriers underpinning the glass ceiling: a review of its causes in the Boards of Directors of IBEX35 companies			123
Virginia Martínez Ayuso and Irene Saavedra Robledo			
BOOKS			
Reviews			137
CONTENTS			
Contents, abstracts			145
Coordinator: José López-Tafall Bascuñana			

ÁLVAREZ CAMIÑA, Sergio; NÁJERA IBÁÑEZ, Alfonso and ESPEJO GIL, Francisco

The impact of climate change on the financial and insurance sector

Abstract: Climate change affects all areas of society, and the financial and insurance sector is no exception. As well as being impacted, both are stakeholders, providing investment products and policies specifically devoted to mitigating and adjusting, and managing the derived risks. This article deals with these investment products and policies and how the financial and insurance sector can and must play a role in addressing the “tragedy of the horizon” of climate change management, from the general and Spanish outlooks.

Key words: tragedy of the horizon, carbon bubble, climate risks.

JEL classification: G22, G23, G28, Q54, Q56.

CASTILLA PORQUET, M^a Luz and VAN DELLEN, Franck

Spain before climate change. Challenges in the transition to a low carbon economy

Abstract: The Paris Agreement has assisted in establishing the foundations of an international agreement that must avoid an increase of global temperatures above 2 °C. In this context, our economy must be capable of detaching growth potential, in a recovery context, from greenhouse effect gas (GEGs) emissions. This gives rise to many challenges for administrations, that must contemplate regulatory, innovation or climate adjustment aspects, and for companies, who need to integrate climate change in their businesses and consider the opportunities arising out of a low carbon economy.

Key words: greenhouse effect gases, sustainability, global warming, low carbon economy.

JEL classification: M14, Q54, Q58.

CERVIGÓN SIMO, Juan and LÓPEZ-TAFALL BASCUÑANA, José

What climate change is and how to fight it

Abstract: This article explains the scientific foundations of climate change, it provides a forecast of the types of impacts and their potential progress in the medium term. On this basis, there is a detailed review of the international combat against climate change, reflecting on key milestones such as the Framework Convention, the Kyoto Protocol and, finally, the recent Paris Agreement.

Key words: global warming, emissions, greenhouse effect gases, environmental policy, Paris Agreement.

JEL classification: F53, Q2, Q4, Q54.

ESCRIBANO FRANCÉS, Gonzalo and LÁZARO TOUZA, Lara

Governance, integration and securitisation of climate change

Abstract: The Paris Agreement adopted in December 2015 is the result of over two decades of talks, progress in the knowledge of climate change and its consequences, reductions of the cost of renewables and increases in the level of concern of business and citizens. Despite the diplomatic success of Paris, the commitments to limit the worst effects of climate change are insufficient to prevent harmful interference with the climate system. Effectively combating the worst consequences of this phenomenon means integrating the climate variable in decision-taking processes (Climate Policy Integration, CPI). Moreover, we have to increase our level of ambition. All the above, without “securitising” climate change. That is, without treating it like an existentialist threat that could lead to exceptional measures, set aside from the ordinary decision-taking processes.

Key words: climate changes, globalisation, environment.

JEL classification: F01, F53, Q54.

MARTÍN BARBERO, Isaac and ALVAR VILLEGAS, Jorge

Climate change to dynamise activities of Spanish companies abroad. Available opportunities.

Abstract: Climate change shall be negative for economic activities in Spain, but Spanish companies are well positioned to take advantage of mitigation and adaptation opportunities, as Spain has committed strategically to some of the sectors most linked to climate change (transport, water, energy and engineering, and consultancy associated to the above). The time is right, thanks to international political change, greater availability of funds and awareness, and National Determined Contributions are a good guideline to look for projects. Moreover, beyond these traditional opportunities, others will arise due to changes in consumer habits of the population.

Key words: climate change, internationalisation, climate financing, responsible consumers.

JEL classification: F180, F590, Q580.

MARTÍNEZ AYUSO, Virginia and SAAVEDRA ROBLEDO, Irene

Barriers underpinning the glass ceiling: a review of its causes in the Boards of Directors of IBEX35 companies

Abstract: This article offers an in-depth analysis of glass ceilings in Boards of Directors of the IBEX35 companies, based on its root causes for management roles. These causes have been structured in a model of the barriers to the glass ceilings, that allowed us to develop a questionnaire to send to the appointment committees of the boards of directors. The results of this questionnaire reveal that the current barriers underpinning the glass ceilings arise out of a small number of causes, with different characteristics.

Key words: gender discrimination, women, listed companies, corporate governance.

JEL classification: J71, J78, M12.

NÚÑEZ SÁNCHEZ, Julián

The infrastructure sector, a huge ally in combating climate change

Abstract: There are three infrastructure areas where investment efforts would have a direct impact on climate change: water, environment and energy. The realities of our country, including the water stress we suffer or the agri-food challenge that lies ahead, urgently require greater efficiency in employing the available water resources. Additionally, with measures relating to the treatment of waste, protection and regeneration of the environment, reduction of emissions or the impulse of renewables, energy efficiency and inter-connectivity with Europe (both for electricity and gas), we can take strides ahead in this fight.

Key words: investments, challenge, urgency, efficiency, resources.

JEL classification: Q01, Q4, O13.

VILLARIG TOMÁS, José Miguel

The role of renewable energies against climate change. A review of the available options

Abstract: Renewable energies play a key part in combating climate change and shall have a stronger role in the future after the Paris Agreements. The future shall be renewable or not at all is the conclusion reached by the 195 countries meeting at COP21. Renewables are clean, autonomous technologies and, very often, they are already competitive economically and shall be even more competitive if traditional technologies pay for the pollution they generate. The commitment to renewables was consolidated over the past year, with an investment of 286,000 million dollars worldwide.

Key words: climate risks, sustainability, clean emissions, environment.

JEL classification: E2, O44, Q2, Q5.

