

# **Energy Security and Climate Change Policy in the OECD: The Political Economy of Motor Fuel Taxation**

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## Abstract

Over the past two decades, economic instruments, such as energy taxes, have played an increasingly important role in the environmental policies of OECD member countries (OECD, 2001; 2006b). At the same time, recent experience with environmental taxation in Sweden, Finland, Germany, Norway, Denmark, Belgium, the Netherlands, and most recently, in Italy and the UK, has sparked growing interest in the role these economic instruments can play in achieving strategic foreign policy goals (IEA, 2007; IISD, 2007). But while there has been a discernable shift toward using economic instruments in support of various policy objectives, the precise form taken by environmental taxes has not been uniform across the OECD. Within Scandinavian countries, for instance, different levies have been imposed on different tax bases (with important exemptions for key industries) and revenues from environmental taxes have been used in different ways. In other parts of the OECD, proposals for “greener” taxes have altogether failed, sometimes miserably. In light of the myriad of challenges posed by global climate change and energy (in)security, what explains variance in environmental taxation across the OECD? This paper tests several key hypotheses commonly found in the international and comparative political economy literatures in order to develop an explanation for why some democracies are more able and willing to impose higher carbon taxes on parts of their populations than others. Implications of this analysis for thinking about problems associated with domestic and international climate and energy policy will also be discussed.

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## I. Introduction

Since the mid- 1990s, energy taxes have played an increasingly important role in the environmental policies of OECD member countries (OECD, 2001; 2006b).<sup>1</sup> At the same time, experience with energy taxes in Sweden, Finland, Norway, the Netherlands, Denmark, Italy and most recently the UK, has sparked growing interest in the role these economic instruments can play in achieving strategic foreign policy goals (IEA, 2007a; 2007b; IISD, 2007). But while “green tax” reform is frequently advocated by otherwise influential economists and international organizations like the OECD, *the same energy sources are taxed at widely different rates in different countries*, even among similarly situated polities in the global political economy. In light of the challenges of energy security and global climate change, what explains variance in energy taxes across the OECD?

In order to garner a better understanding of the *political determinants of energy taxation*, this paper analyzes several key hypotheses commonly found in the international and comparative political economy literatures. Since the transportation sector accounts for nearly half of total world oil consumption (IEA, 2004: 84), two thirds of GHG emissions, and roughly 90 per cent of total environmentally related tax revenues (OECD, 2001: 55), the empirical component of this paper focuses exclusively on tax rates applied to motor fuels, which are here understood as an *indirect* form of carbon tax.<sup>2</sup> The paper’s main finding is that *political institutions matter* – the level of corporatist decision-making in a country stands out as the most powerful predictor of motor fuel tax rates across the OECD. Given recent carbon tax developments in Quebec and British Columbia, however, this finding is in need of qualification. Future work by the present author will assess the extent to which the corporatist explanation for variance in tax rates applied to motor fuels can be generalized to *direct* carbon taxes implemented in the OECD.

The following paper begins with a theoretical discussion concerning reasons why many analysts call for environmental taxation; a discussion that is largely rooted in the public economics literature on externalities. Next, the paper highlights key benefits and proponents of the carbon tax, as well as some of their existing limitations in practice. In light of their shortcomings, and given the relatively few carbon-tax countries in the OECD, the paper proceeds to examine variance in tax rates applied to motor fuels. After highlighting some puzzling variation, the paper reviews recent scholarship on the determinants of (energy) taxation and identifies three potential explanatory hypotheses. In order to test these rival explanations, the paper develops a regression model using cross-sectional data made available from International Energy Agency and OECD databases. The final sections of this paper discuss empirical results, identify areas for future research, and examine the implications of this analysis for thinking about problems

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<sup>1</sup> While Scandinavian counties have paid considerable attention to “green tax” reform, other countries have been considerably less keen. Revenues from environmentally related taxes in Denmark, for instance, accounted for over 10 per cent of total tax revenues in 2003, while environmental tax revenues accounted for less than 3.5 per cent of total tax revenues in the U.S. for that same year (OECD, 2007).

<sup>2</sup> The distinction made between direct and indirect forms of a carbon tax is elaborated below.

associated with domestic and international responses to energy security and global climate change.

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IT IS PART OF HIS UNFINISHED DISSERTATION AND HE WOULD  
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