

Regional Energy Supply in Electricity and Transport

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Introduction

The objective of this research endeavor is to gain a better understanding of regional energy supply at different levels: An analysis of market structure and pricing in the gasoline markets of Turkey, Lebanon, Jordan AND Modeling alternative nuclear free and carbon reduced scenarios for Turkey's electricity sector.

One part of this project deals with the transport sector that is the fastest growing energy consuming sector in large parts of the developing world. Our research will present an in-depth analysis of market structure and pricing in the gasoline markets of Turkey, Lebanon and Jordan and present some policy tools that will help constrain energy consumption. The other part of this project is concerned with the worldwide trend away from nuclear energy in electricity generation. In Germany, for example, all nuclear power plants will be phased out by the end of 2022 and a so-called 'energy revolution' with the aim to significantly increase the share of renewables has started. This 'energy revolution' affects numerous factors related to the electricity supply mix. Turkey is a major regional player in the energy field, linking European markets to the Mashreq. Turkey's energy sector has undergone substantial reforms over the past 12 years, adapting legislation to its European partners. So far, however the Turkish government is still planning to satisfy some of its need in future installed capacity in the electricity sector with nuclear power stations. Our paper will provide an alternative to this current plan by modeling alternative nuclear free and carbon reduced scenarios for Turkey's electricity sector.