

# How Can Cyprus Meet Its Energy and Climate Policy Commitments?

## The Importance of a Carbon Tax

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### *Abstract*

The paper presents a new set of energy demand forecasts for the Republic of Cyprus up to the year 2040, taking into account recent oil price developments and focusing on the ability of Cyprus to achieve the greenhouse gas emission reduction targets agreed by EU leaders in October 2014. The emphasis is on emission reductions in those sectors that are not subject to the EU Emissions Trading System, i.e. on final energy demand sectors excluding aviation and the cement industry. According to a 'baseline' scenario, energy demand will grow modestly over the coming decades, which is far from sufficient for Cyprus to achieve its 2030 emission targets. We therefore develop two additional scenarios that assume the implementation of an economy-wide carbon tax from 2016 onwards. It turns out that a strong tax increasing by around 15 Euros per tonne of CO<sub>2</sub> every year from 2016 onwards is necessary in order to induce a sufficient decline in carbon emissions, or alternatively a carbon tax that can start from very low levels and increase geometrically up to 2030. Such taxes, which are also recommended by international organisations, would lead to a more rigorous implementation of energy efficiency measures in buildings and transport than currently foreseen, and would allow Cyprus both to comply with the EU decarbonisation targets and to reduce its dependence on fossil fuels.

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