

Growing Green – Opportunities for Turkey

Submitted by [Martin Raiser](#)



Can emerging markets make economic growth compatible with climate action? Can the trade-off between growth and rising emissions be influenced by policy?

For a country like Turkey – with the lowest carbon footprint in the OECD (around 5 tons per person in 2008), but also one of the highest rates of growth of carbon emissions over the past two decades – these are not idle questions. A recent talk with a senior Turkish policy maker about how Turkey is adjusting its policies to meet the challenge of growing green left me feeling optimistic about the role Turkey can play in this discussion. I believe that for Turkey, growing green is an opportunity. Let me explain why I think so:

First, there are Turkey's endowments. We tend to think of Turkey as an energy poor country – dependent on imports for almost 60 percent of its domestic needs. But the country has significant renewables potential. For instance, Turkey's economically viable hydro potential is estimated at 140 TWh, or close to 60 percent of total 2012 energy demand. Surrounded by

three seas, Turkey is one of the most promising markets for wind power in Europe and it has lots of sunshine - as millions of tourists can confirm! Sitting on the Anatolian fault line, Turkey is geologically active and is estimated to have the 7th largest geothermal resources in the world. These are enviable endowments for a green growth future.

Second, although the energy intensity of its economy is not high, Turkey has large unexploited reserves in energy efficiency. For instance, only 5 percent of buildings in Turkey are properly heat insulated (my corner office in Ankara is clearly not one of them...), yet potential energy savings in this sector are 30 percent. In some industrial sectors, inefficiencies are similarly large. Greater energy efficiency is thus both a significant commercial opportunity, but also a strategic priority to ensure the growth in domestic demand for energy is kept in check.

If Turkey brought its renewable energy potentially fully into operation and increased the level of energy efficiency to the top of the range among developed economies, it could grow fast and still remain one of lowest OECD countries in terms of carbon footprint. Moreover, many of the required investments will pay for themselves. A recent [EBRD report](#) shows that carbon emission savings through investments in hydro and wind power - as well as a wide range of energy efficiency applications - essentially pay for themselves. Indeed, up to 111 million tons of carbon emissions could be avoided at no additional cost at all!

Finally, there is one more reason for optimism. Turkey's rapidly growing demand for energy and high domestic energy prices could help catalyze a growing domestic production base for green technologies - from wind and hydro turbines, to solar panels and energy efficient building materials. Turkey, with its excellent market access to the European Union and a developed manufacturing base, could become a production location of choice for green technologies. Turkey could learn from Germany, Korea, China and California how to make use of this opportunity.

Muharrem Bey, one of Turkey's pioneering renewable investors, shares my optimism. With assistance from a World Bank financed credit line, Muharrem has invested around USD 135 million in three geothermal plants in western Turkey. He is also confident that these will not just be green but profitable as well. Perhaps more telling is that Muharrem is calling these plants "Dora" after the name of his granddaughter. He chose this name to signal that his commitment to renewables is a commitment to the lives of future generations. It's a kind of joint pension and environmental insurance for his granddaughter. Are you similarly optimistic about the present and the future?

Source: <http://blogs.worldbank.org/voices/growing-green-opportunities-for-turkey>