

The Economic Case for Combating Climate Change

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Contrary to common belief, countries that take ambitious action against climate change can benefit macroeconomically—if they prioritize the most efficient measures they use economic optimization for mitigating emissions. Many businesses strongly endorse such action, but policies need to overcome microeconomic hurdles.

How To Decarbonize A Developed Economy – the example of Germany

In one of the most comprehensive studies of national emission reduction potentials to date – a study which was commissioned, supported, and endorsed by German industry – BCG recently showed that Germany can accomplish an 80% reduction of its 1990-level greenhouse gas (GHG) emissions by 2050, using only proven and accepted technologies. Even if Germany moves forward unilaterally, an efficient emissions reduction path would benefit the national economy. With global cooperation, also 95% reduction would not harm economic growth in Germany.

Proven technologies can go a long way

BCG applied lessons from this study to six countries that, along with Germany, are collectively responsible for more than 60% of global emissions: the US, China, India, Russia, Brazil, and South Africa. All could close at least 75% of the gap between their current emissions trajectory and their individual 2050 2°C path contributions with proven and accepted technologies. Also for the remaining abatement, solutions exist today.

The Early Mover Economic Advantage

Contrary to conventional wisdom, many countries can take significant unilateral action without suffering an early-mover disadvantage. In fact, every analyzed country could benefit economically from moving closer to its 2°C emission target.

Reaching 2°C – A \$75 Trillion Challenge

The last mile to 2° emissions levels will be much harder to travel. It will require expensive and unpopular measures such as synthetic fuels and carbon capture and storage for some industrial processes (although not for coal power, for which such measures are too expensive). It will also

mean a cumulative global investment of about \$75 trillion through 2050, or 2% to 6% of countries' annual GDPs.

The Limits of Emission Trading

Catalyzing this level of investment would require strong government action – and widespread international collaboration on reducing emissions. Global emission trading, often cited as a measure that could pave the way to 2°C, falls short of being a one-stop solution. All nations need to trigger both cheap and expensive mitigation mechanisms simultaneously, and many countries with lower emissions reduction targets have no incentive to trade. These countries will need low-interest financing support to shoulder their emissions mitigation investments.

Time to Move

Preparing for accelerated emissions reduction can benefit both countries and companies. Given the possible economic gains from such policies, policymakers should focus on developing comprehensive national mitigation agendas that maximize economic advantage and on policies that encourage companies and individuals to act. Businesses should prepare for such a policy push and a faster-than-expected transition from fossil fuels to carbon-neutral technologies. Early movers stand to profit.

About the author:

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