



Governor Jerry Brown, c/o State Capitol, Suite 1173, Sacramento, California, CA 95814, United States of America

17 July 2017

Dear Governor Brown,

I am writing to congratulate you on the leadership on climate change you continue to show in the United States, and on your efforts to extend California's landmark legislation, particularly its cap-and-trade program. Such a program should, indeed, be at the core of a growth strategy for a dynamic, modern, strong and sustainable economy. California is particularly well-equipped to lead the world in the growth story of the 21st century.

As a member of the international Carbon Pricing Panel, you will know that I co-chaired, with Professor Joe Stiglitz, the 'High-Level Economic Commission on Carbon Prices', which published its final report in May 2017. Five of its key findings were:

- 1. Tackling climate change is an urgent and fundamental challenge. It is for this reason that 152 countries have so far ratified the Paris Agreement, which includes a commitment to "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change". This goal is primarily motivated by a need to avoid the risks of immense economic, social and ecological damages that could result from a failure to limit the increase in temperature to well below 2°C.
- 2. A well-designed carbon price is an indispensable part of a strategy for reducing emissions of greenhouse gases in an efficient way. Carbon prices are intended to incentivise the changes needed in investment, production and consumption patterns, and to induce the kind of technological progress that can bring down the costs of emissions reductions in the future. Efficient carbon-price pathways begin with a strong price signal in the present and a credible commitment to maintain prices high enough in the future to deliver the required changes.
- 3. Revenue can be raised efficiently by explicit carbon pricing, implemented through a cap-and-trade programme for instance, because it helps to overcome a huge market failure. This market failure arises from the fact that the prices of goods and services that involve greenhouse gas emissions do not reflect the costs they impose on others through climate change impacts. The failure to include these costs represents an enormous implicit subsidy for fossil fuels and distorts the market.

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Chair: Professor Lord Stern of Brentford



Carbon pricing can correct the market failure and remove the implicit subsidy. The revenue can be used in a number of beneficial ways.

- 4. Carbon pricing should be complemented by well-designed policies to tackle other market failures and imperfections. These failures are related to knowledge spill-overs, learning and research & development, information, capital markets, networks and the unpriced co-benefits of climate action (such as reductions in local air pollution).
- 5. Based on the available evidence, the explicit carbon price level that is consistent with achieving the goals of the Paris Agreement is \$40-80 per metric ton of carbon dioxide by 2020, and \$50-100 per metric ton of carbon dioxide by 2030.

Carbon pricing is already in operation or planned in many countries and regions around the world. California's cap-and-trade system is highly regarded in many other countries because its design has taken into account the lessons that have been learned from older schemes, such as the European Union Emissions Trading System. California has also shown leadership in garnering efficiencies by linking its cap-and-trade program with schemes in other geographies.

California is showing the way to a much stronger, more attractive and sustainable pattern of growth. It is also demonstrating to the world that there is a clear commitment in the State to the modern way of doing things, thus greatly enhancing the confidence necessary for investment and economic growth. California is demonstrating that growth must be founded on investments in the clean and modern technologies of the 21st century, not the dirty and outdated methods of the 19th century. I hope that California's lawmakers will recognise the important role that the cap-and-trade program can play in securing a prosperous future.

Yours sincerely,

Professor Lord Stern of Brentford

Chair

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