

An Economist's Post COP26 Thoughts:

Lessons for Removal of Fossil Fuel Subsidies and Loss and Damage Finance for COP27

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COP 26 negotiations closed on 13 November with remaining unfulfilled pledges, despite going to extra time. Removal of fossil fuel subsidies and finance for loss and damage have been themes hotly debated and where the Global North-South divide has been mostly acute.

In simple terms, LDCs typically fear that their path towards development and poverty alleviation would be hindered, if fossil fuels were to be excluded from the energy generation mix. The last minute intervention at COP26 of some LDCs negotiators lead by India and China demonstrated this concern. The phrase 'coal phase-out' was ultimately changed into 'coal phase-down', leading to COP26 President Alok Sharma's apologetic, emotional speech at the conclusive plenary session. As an economist I am well placed to appreciate these issues, but I also wonder at the persistence and impact of economic systems riddled with fundamental inefficiencies that delay progress and prosperity. Energy markets often suffer from heavily subsidization of fossil fuels and government regulated electricity prices. These market distortions prevent the optimisation of the fuel mix in electricity production, promote overconsumption of fossil fuels and ultimately delay the transition towards sustainable development

To illustrate this point, take the case of Bangladesh. At COP26, Bangladesh has led the negotiations for the Climate Vulnerable Forum (CVF). The CVF is a group of 48 countries facing high disaster risk from climate change and strongly advocating actions to limit the rise in global average temperatures to 1.5 degrees Celsius above pre-industrial times, consistently with the target of the 2015 UNFCCC Paris Agreement. Bangladesh has pledged to reduce GHG emissions by 15% (of which 5% is unconditional to any transfers from the global community) with respect to Business as Usual by 2030 and has renewed this commitment at COP 26 in Glasgow. Yet its overall CO2 emissions have dramatically risen in the last ten years, mainly due to an increasing reliance on oil (currently more than 30% of electricity generation is from oil). In addition, plans for stepping up the use of domestically sourced coal and waste to energy from incineration are under discussion. Given its dependence on fossil fuels and carbon-intensive technology would Bangladesh succeed in fulfilling its Paris Agreement pledge?

Recent research by economists at Durham University Business School, Durham Energy Institute, North-South University Bangladesh and Copenhagen Business School has evaluated the effects of several decarbonisation policies in Bangladesh, namely the removal of intra-sectoral electricity price distortions (including implicit fossil fuels subsidies) and the implementation of carbon taxes. Results show that a move towards liberalised energy markets can create a win-win situation by improving economic performance and reducing CO2 emissions by 4.6%, therefore helping Bangladesh achieve its unconditional Paris Agreement target. Interestingly eliminating energy price distortions trumps carbon taxes, although a policy package that includes all decarbonisation mechanisms can deliver even higher reduction in CO2. These lessons hold for any country where a fixed price system for energy is

in place. It is hoped that COP27 will give more attention to the matter of energy price distortions for an effective decarbonisation agenda in LDCs.

Other contentious issues emerged at COP26 have concerned liability and compensation for loss and damage caused by historical greenhouse gas emissions from developed countries. In the policy debate at COP26, the word 'compensation' has often been substituted with the term 'solidarity', as legal liability is hard to determine when it comes to Climate Change. From an economist's point of view, the debate is further complicated by the implications of the influential work of Economics Nobel Laureate Ronald Coase in the 1960s. Accordingly, compensation of victims of environmental damage may create the perverse incentive to not protect oneself from further damages for the sake of compensation. Would Loss and Damage Finance translate into more misery for vulnerable communities? It is a tough road ahead to COP27.

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Decarbonisation Policies and Energy Price Reforms in Bangladesh

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Abstract:

Bangladesh electricity sector suffers from heavily subsidization of fossil fuels and government regulated electricity prices. These market distortions prevent the optimisation of the fuel mix in electricity production, promote overconsumption of fossil fuels and ultimately delay the transition towards sustainable development. As a signatory of the 2015 UNFCCC Paris Agreement, Bangladesh has pledged to reduce GHG emissions by 15% (of which 5% is unconditional) with respect to Business as Usual by 2030, yet its overall CO₂ emissions are dramatically increasing. Therefore, urgent actions are needed for Bangladesh to fulfil its climate pledge. We use a fit-for-purpose Dynamic Stochastic General Equilibrium (DSGE) model to evaluate the effects of several decarbonisation policies in Bangladesh, namely the implementation of carbon taxes and the removal of fossil fuel subsidies and intra-sectoral electricity price distortions. We find that all policies can deliver a win-win situation in terms of macroeconomic variables and CO₂ emissions with respect to a benchmark scenario that

includes existing price distortions and no carbon taxes. The reduction of 4.6% in CO2 emissions achieved in the price reform policy experiment indicates that a move towards liberalised energy markets can indeed help Bangladesh achieve its Paris Agreement target. Thus, we recommend the government considers reforming electricity and fossil fuel price structure to foster both future economic development and environmental sustainability.

Keywords: Energy Price Reforms; CO2 Emissions; DSGE model; Bangladesh; Carbon Taxes, Fossil Fuel Subsidies.

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