

TAX AS A FORCE FOR GOOD

Aligning tax systems with the SDGs
and the inclusive circular economy

CASE STUDY BANGLADESH

The Ex'tax Project

In cooperation with Cambridge Econometrics

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Bridging the SDG finance gap

This is the era of the Sustainable Development Goals (SDGs); an era of unprecedented global social and environmental challenges. The most daunting task will be to adapt the metabolism of our economies to match the carrying capacity of the earth and stay well below 2°C global warming. We face equally important social challenges in our societies, including enabling a growing population to develop to their full potential and find decent work. According to the United Nations, achieving the SDGs is going to cost US\$5-6 trillion a year. Developing countries alone face an annual financing gap of \$2.5 trillion. Official development assistance (ODA) is just \$150 billion per year, and on a downward trend. Private flows of investment are also considerably below the level of SDG investment needs. This means there is a massive financing gap.

Tax and the circular economy

Aligning economic growth with the goals of the SDGs will be key. Therefore, a shift is needed from the linear 'take-make-waste' economy, towards an inclusive circular economy, which is regenerative, carbon neutral and distributive. Such circular economies

require labour- and knowledge-intensive activities (e.g. repair and maintenance services, recycling, refurbishment and R&D), which could significantly contribute to job creation. Currently, however, governments tend to increase the tax burden on human labour, which incentivises businesses to reduce labour input. At the same time, governments put low or no taxes on natural resource use (such as carbon emissions, fossil fuels and water), thereby leaving resource use unrestrained, causing overconsumption, pollution and waste.

Leapfrogging tax systems to the SDG era

Given the high unemployment rates in low- and middle-income countries, increasing the tax burden on labour may not necessarily be the best option to raise revenues sustainably. Could taxing pollution rather than people, as advocated by UN Secretary-General António Guterres, be a way of 'leapfrogging' tax systems to the SDG era? Studies indicate that such tax reform (also known as Environmental Tax Reform) can indeed have positive economic, social and environmental impacts. A World Bank study, for example, demonstrated that a domestic carbon tax of

\$30 per tonne of CO₂ would provide the resources to more than double current levels of social assistance in 60 countries. Over the years, many researchers and international organisations have called for tax reform; putting a price on pollution and resources and using the revenues to lower the tax burden on labour and increase (social) spending.

To achieve the SDGs, a shift is needed from the linear 'take-make-waste' economy, towards an inclusive circular economy, which is regenerative, carbon neutral and distributive.

Opportunities and risks of tax reform

The goal of this study is to analyse opportunities and risks of aligning tax policy with the goals of the inclusive circular economy in low- and middle-income countries, focussing on Bangladesh as the first case study. Bangladesh has one of the largest gaps between tax revenue and GDP. Green taxes (including

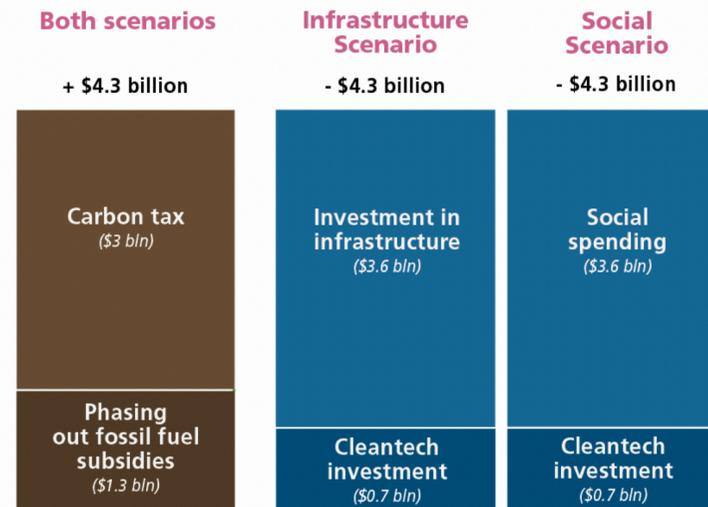
restructuring of fossil fuel subsidies), could help raise much-needed tax revenues. The country is highly prone to climate disruption, pollution levels are high and renewable energy sources provide only a fraction of energy needs. It has a large, growing and resilient population of 165 million, with 2 million youths entering the job market every year. The country has a proven track record of effectively addressing poverty and other challenges. Sustainable inclusive growth is a major national priority.

Cambridge Econometrics has modelled some of the impacts of two preliminary scenarios, which include putting a price on carbon emissions and abolishing fossil fuel subsidies, while using the revenues to invest in clean technologies, infrastructure and social spending. The modelling suggests that by 2025, such tax reforms could lead to higher GDP and employment levels, while reducing carbon emissions and energy imports. The transition can be highly progressive when revenues are mainly used to increase social spending.

Two preliminary scenarios

For the purpose of this study, Cambridge Econometrics developed the 'FRAMES: Bangladesh' model, to estimate potential green tax revenues and macro-economic impacts of tax reform scenarios. The Ex'tax Toolkit and Methodology were used to develop two preliminary scenarios (see Figure A). Leading factors in this process were, amongst others, the national priorities of Bangladesh, data availability and the scope of the FRAMES model. The measures are assumed to be introduced gradually from 2020, to reach to reach the full measures by 2024. In the year 2025, both scenarios are expected to raise \$4.3 billion in revenues by 1) introducing a carbon tax of \$30 per tonne of CO₂ emitted by industries and the power sector, and 2)

Figure A: The Infrastructure Scenario and the Social Scenario (in 2025, Bangladesh)



Source: Model projections, Cambridge Econometrics 2019.

phasing out oil and natural gas subsidies for industries and power generation. In the modelling, every year, the revenues are fully recycled:

- In the *Infrastructure Scenario*, all revenues are recycled through investments in clean technology and infrastructure.
- In the *Social Spending Scenario* (or *Social Scenario*), all revenues are recycled through investments in clean technology and social spending targeted towards the lowest two income quintiles.

In both scenarios, the cleantech investments are targeted towards the textiles sector (Bangladesh's most important export sector). Figure B provides some key results over the 2020-2025 period, demonstrating

decoupling effects in the scenario, as GDP is higher, and emissions are lower. An increase in employment is observed in each scenario.

Cumulative results

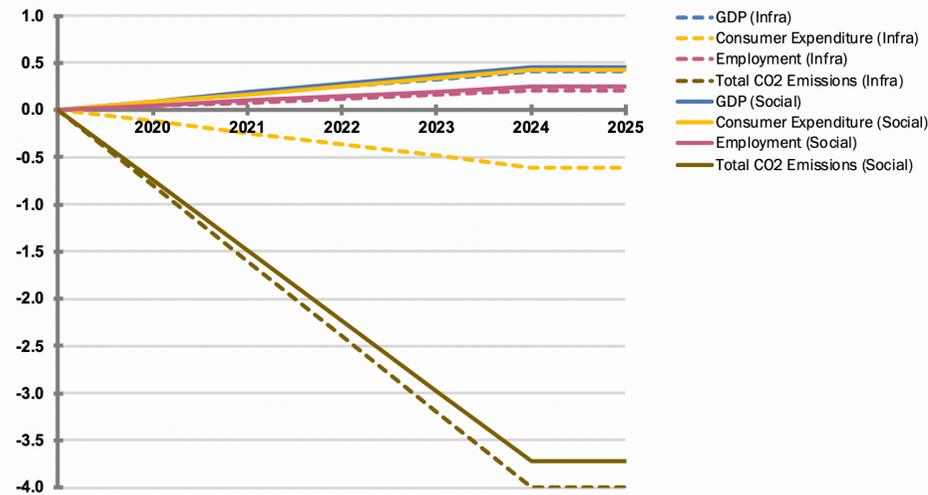
Over the 2020-2025 period, the scenarios add \$6.9 billion (in the *Infrastructure Scenario*) and \$7.8 billion (in the *Social Scenario*) to GDP, compared to business as usual. Additional results over the six-year period are:

- **Resource mobilisation.** Phasing out fossil fuel subsidies could potentially raise \$4.7 billion in domestic resources, while a carbon tax could

add another \$10.6 billion in domestic resources.

- **Job creation.** Both scenarios show increases in employment (540,000 and 670,000 years of employment respectively).
- **Carbon emission reductions.** Both scenarios demonstrate a significant reduction in carbon emissions (saving 19.9 and 18.5 megatonnes of carbon respectively).
- **Savings on energy imports.** In both scenarios, Bangladesh saves significant amounts on energy imports (\$429 million and \$405 million respectively).
- **Public investments.** In the *Infrastructure Scenario* \$12.8 billion is invested in infrastructure. In the *Social Scenario*, \$12.9 billion is invested in social protection. Cleantech investments in both scenarios are to \$2.6 and \$2.5 billion respectively over the 2020-2025 period.

Figure B: Overall result: decoupling (2020–2025, % difference from baseline, Bangladesh)



Source: Model projections, Cambridge Econometrics 2019.

Tax reforms could lead to higher GDP and employment levels, while lowering carbon emissions and reducing energy imports.

Distribution of benefits and costs

As with any reform, the benefits and costs will not be spread evenly. The modelling results suggest that a progressive impact with higher benefits (in relative terms) for lower income households is possible, particularly in the *Social Scenario*. For businesses, in the *Infrastructure Scenario*, the largest increases in output, both in relative and absolute terms, are in the construction, manufacturing (excluding textiles), mining and quarrying sectors. These sectors benefit from the investments in infrastructure. Some of the

manufacturing companies in the supply chain also benefit. Output falls marginally in sectors which are supplying consumer final demands, such as retail. In the *Social Scenario*, most sectors demonstrate an increase in output as they benefit from higher local consumer spending. Manufacturing and construction also have relatively high increases, because of the investment in cleantech for textiles.

Results for the textiles sector

In both scenarios, the textiles sector shows a slight negative result in terms of gross output (0.24% and 0.15% respectively) by 2025, but overall, the Bangladesh economy would be stronger and more competitive in terms of carbon intensity and energy import dependency. Also, it's important to note that the competitiveness impacts of the cleantech

investments (totalling more than \$2.5 billion) are not yet captured in the model. Bangladesh is the world's second-largest exporter of clothing, and the sector represents 80 percent of foreign earnings. As one of the most polluting industries, operation in a fast-changing global market, the global textiles industry is at a crossroads; continuing the linear model (while imposing external costs to society and future generations), or shifting to circular models, and adapting to changing circumstances. In light of global trends, tax reform could be a way to reduce risks and future-proof the sector.

Balancing the interests of stakeholders

The scenarios presented in this study do not claim to be a blueprint or short-term solution, but are a medium- to long-term pathway, to assist in the

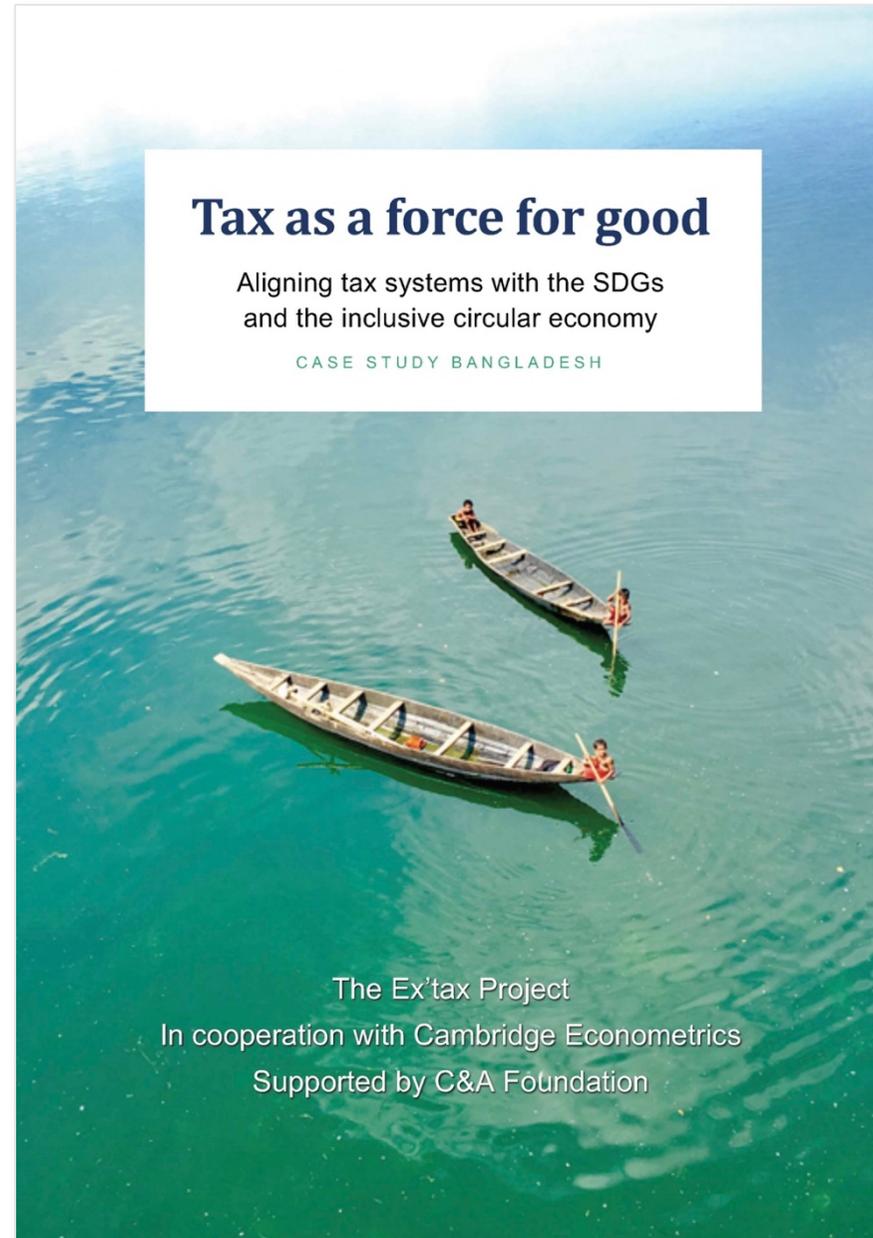
process of balancing the interests of different stakeholders. Any implementation pathway should be researched and then monitored by the designated national institutions with full access to national statistics. This study is meant to set an example for similar analyses in other countries—particularly those with low- and middle-incomes, facing similar challenges.

KEY MESSAGE FROM THE RESULTS:

It is possible to design policy measures that reduce harmful emissions and final energy consumption, while at the same time stimulating the economy of Bangladesh, creating jobs and (in the Social Scenario) increasing income for the lowest income groups. These results demonstrate that Bangladesh doesn't need to choose between development and environment.

Prosperity based on human capital

The foundations of modern tax systems were laid down in the era of the industrial revolution; before globalisation and mass consumption, before the emergence of climate disruption and water supply risks, and before digitisation and automation. In the SDG era it is vital for governments to serve the interests of the people and business at the same time, and to fairly distribute risks and opportunities. Smart tax policies could help countries to 'leapfrog' into the SDG era. Stakeholders, businesses, governments and NGOs should work together to turn tax into a 'force for good' and help build modern tax systems that enable prosperity based less on natural resource use and more on the abundance of human capacities and talents. For this is growth that can be sustained by generations to come.



More information: www.ex-tax.com/bangladesh