

Addressing Azerbaijan's Carbon Footprint

A Preliminary Case for a Carbon Tax Policy

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Azerbaijan is a country that relies heavily on fossil fuel production and consumption, leading to a high level of greenhouse gas emissions. These emissions contribute to climate change, which can cause significant adverse environmental, social, and economic impacts. Azerbaijan is also particularly vulnerable to the specific impacts of climate change, including sea level fluctuation, extreme weather events, and desertification.

At present, Azerbaijan's energy sector is dominated by oil and gas production and consumption, with natural gas accounting for around 50 percent of the country's primary energy consumption. Azerbaijan is also a major exporter of oil and gas to Türkiye, the Western Balkans, several EU member states, and a few other countries. Baku has made some progress in developing renewable energy sources, such as wind and solar power, for both domestic consumption and export, but these currently account for a very small percentage of the country's energy mix. The government has set a target of generating 30 percent of its electricity from renewable sources by 2030. However, achieving this goal will require significant investment in Azerbaijan's renewable energy infrastructure.

Despite the country's dependence on fossil fuels, there is growing recognition of the need to transition to a more sustainable and low-carbon economy. In 2015, Azerbaijan ratified the Paris Climate Accords, which set a goal to limit global warming to well below 2 degrees Celsius above pre-industrial levels. This is unlikely to be met, whether at the national or international level. Still, to get as close to it as possible, Azerbaijan will need

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to significantly reduce its greenhouse gas emissions as well as both deepen and accelerate its transition to renewable energy sources.

One effective policy measure to reduce greenhouse gas emissions and encourage the transition to renewable energy sources is to implement a carbon tax. A carbon tax is a fee imposed on the production, distribution, and use of fossil fuels based on the amount of carbon dioxide they emit. The revenue generated from such a tax could be used to fund clean energy projects and support vulnerable communities affected by climate change. However, implementing a carbon tax in Azerbaijan would require careful consideration of the country's specific context and needs, including the policy imperative to balance economic development and environmental protection. This IDD analytical policy brief examines some of the potential benefits of implementing a carbon tax in Azerbaijan as a means of reducing greenhouse gas emissions and encouraging the transition to a sustainable, low-carbon economy.

Setting an Appropriate Carbon Price

To effectively incentivize the reduction of greenhouse gas emissions and encourage the transition to renewable energy sources, the government of Azerbaijan could establish a price per ton of carbon dioxide emissions that is high enough to generate a sufficiently significant economic disincentive for polluters, yet low enough to avoid an undue financial burden on households and industries.

Establishing an appropriate carbon price would require a careful balance between the need to reduce emissions and the need to maintain economic growth. An overly high price could place an undue financial burden on households and industries, leading to decreased economic activity and potential job losses. However, a price that is too low may not be effective in encouraging a reduction in emissions and thus may fail to provide adequate incentives for the transition to renewable energy sources.

Based on current emissions levels, a price of \$20-\$30 per ton of carbon dioxide would be a reasonable tax benchmark for Azerbaijan to pursue. This price range is in line with the World Bank's recommendation, which indicates that countries with relatively low emissions should start with a price of \$20 per ton of carbon dioxide and gradually increase the price over time. However, as explained below, a price of \$10 should be applied initially during a transition period of several years (in this period, it should be gradually increased), with various exceptions and rebates factored into the policy.

The carbon tax price should be applied across all sectors of the economy, including the energy, transportation, and industrial sectors. This would ensure that all polluters are incentivized to reduce their emissions and transition to cleaner energy sources.

Implementing a Phased Approach

To give businesses and households time to adjust to the new policy, the government should implement the carbon tax in phases. Starting with a low price and gradually increasing it over time would provide certainty and predictability for businesses and incentivize the development of low-carbon technologies and infrastructure.

A phased approach would allow businesses and households to plan and invest in low-carbon technologies and practices that would ultimately lead to more significant reductions in emissions. Additionally, a phased approach would provide greater certainty for businesses, reducing the potential for sudden shocks to the economy.

To implement the carbon tax in phases, the government could start with a relatively low price, such as \$10 per ton of carbon dioxide, and gradually increase it over a period of several years. This gradual increase would provide time for businesses and households to adjust their operations and invest in low-carbon technologies.

In addition, the government could also consider implementing exemptions or rebates for certain industries or households that may be particularly impacted by the carbon tax. For example, energy-intensive industries may require additional support to transition to low-carbon technologies, while low-income households may require assistance to mitigate the potential impact of higher energy prices.

By implementing a phased approach, the government would establish a predictable and stable environment for businesses to plan and invest in low-carbon technologies, while also ensuring that the transition to a low-carbon economy is equitable and inclusive. This would ultimately lead to more significant reductions in emissions and greater progress towards a sustainable energy and economic future for Azerbaijan.

Allocating Revenue Wisely

To maximize the effectiveness of the carbon tax, the government should use the revenue generated from the tax to further support the transition to a low-carbon economy and to help communities most vulnerable to the effects of climate change.

One approach would be to invest in renewable energy projects, such as wind and solar energy, which ought to help to reduce the country's dependence on fossil fuels and promote the development of a domestic renewable energy industry. These projects could also generate new jobs and stimulate economic growth.

In addition, the government could invest in energy efficiency measures, such as retrofitting buildings and improving public transportation. These measures

have benefits such as reducing energy consumption and emissions while also providing economic benefits.

Another potential use of the revenue could be to support communities most vulnerable to the effects of climate change. For example, the government could invest in flood prevention measures or provide financial assistance to communities impacted by extreme weather events.

The revenue generated by the proposed carbon tax should be allocated in a transparent and accountable manner, with regular reporting on the use of the funds. This would help to build public trust in the carbon tax and ensure that the resulting revenue is being used effectively to address the various impacts of climate change.

By allocating the revenue generated from the carbon tax prudently, the government could ensure that the transition to a low-carbon economy is both effective and equitable. This would help to mitigate the impacts of climate change, generate new economic opportunities, and build a sustainable future for Azerbaijan.

Providing Exemptions and Rebates

To ensure that the carbon tax is equitable and does not place undue burden on households and businesses the government should consider providing exemptions and rebates for certain groups or activities.

For example, the government could provide exemptions for certain agricultural practices that are necessary for food production but have high carbon emissions, such as fertilizer application. The government could also provide rebates for businesses that invest in low-carbon technologies or engage in carbon offsetting activities.

Additionally, the government could provide rebates or tax credits for households that invest in energy efficiency measures, such as insulation or high-efficiency appliances. This would help to reduce energy bills for households and incentivize the adoption of low-carbon technologies.

It is important to ensure that any exemptions or rebates are designed in a way that does not undermine the effectiveness of the carbon tax. For example, exemptions should only be provided for activities that are necessary for essential services or activities that cannot be easily or quickly replaced by low-carbon alternatives.

By providing exemptions and rebates, the government would ensure that the carbon tax is applied in a fair and equitable manner. This would help to build public support for the carbon tax and ensure that the transition to a low-carbon economy is both effective and equitable.

Top Ten Reasons for Using Carbon Tax Revenue to Promote Sustainable Development in Azerbaijan

Using the revenue generated from the proposed carbon tax to fund sustainable development initiatives is the best recommendation for implementing a carbon tax in Azerbaijan. There are various reasons for this. What follows is a Top Ten list.

First, by using the revenue generated from the carbon tax to fund sustainable development initiatives, the government would incentivize the development of low-carbon technologies and infrastructure. This, in turn, would accelerate the transition to a low-carbon economy.

Second, sustainable development initiatives, such as renewable energy projects and energy efficiency retrofits, could generate new job opportunities and stimulate economic growth.

Third, by investing in renewable energy projects, the government would reduce Azerbaijan's dependency on fossil fuels and promote energy independence.

Fourth, by implementing a carbon tax and using the revenue to fund sustainable development initiatives, Azerbaijan could better meet its international climate commitments, such as those outlined in the Paris Climate Accords.

Fifth, by reducing greenhouse gas emissions through sustainable development initiatives, Azerbaijan would improve air quality and reduce the health risks associated with air pollution.

Sixth, sustainable development initiatives, such as water conservation and management programs, would help to address water scarcity—a critical issue for Azerbaijan that has been addressed in previous IDD publications.

Seventh, sustainable development initiatives would help to preserve and promote biodiversity, which is essential for maintaining healthy ecosystems.

Eighth, other sustainable development initiatives, such as flood prevention measures, could enhance Azerbaijan's disaster resilience and reduce the impact of extreme weather events.

Ninth, by using the revenue generated from the carbon tax to fund sustainable development initiatives, the government would build public trust in the policy and demonstrate its commitment to addressing climate change.

And *tenth*, by investing in sustainable development initiatives, Azerbaijan should attract additional foreign direct investment and could become a leader in the transition to a low-carbon economy.

These reasons are supported by evidence from other countries that have successfully implemented carbon taxes and used the revenue to fund sustainable development initiatives. For example, Sweden implemented a carbon tax in the 1990s and has used the revenue to fund sustainable development initiatives, resulting in significant reductions in greenhouse gas emissions while maintaining a strong economy. Similarly, British Columbia in Canada implemented a carbon tax in 2008 and has used the revenue to fund tax reductions and sustainable development initiatives, leading to a reduction in greenhouse gas emissions while maintaining economic growth.

A Necessary Step

Implementing a carbon tax is a necessary step towards reducing greenhouse gas emissions and addressing climate change. Doing so would generate an economic incentive for individuals and businesses to reduce their carbon footprint and promote the use of clean energy. However, to ensure that the carbon tax is effective and equitable, it is crucial to consider the potential impact on low-income households and industries that may face higher costs.

One solution to address these concerns is to use the revenue generated from the carbon tax to fund sustainable development initiatives, such as renewable energy research and development, public transportation infrastructure, and programs to support low-income households in transitioning to clean energy. By reinvesting the revenue into sustainable development initiatives more or less in line with the 2030 UN Agenda for Sustainable Development, the government would promote a more equitable transition to a low-carbon economy while also accelerating the shift away from fossil fuels.

Overall, the implementation of a carbon tax coupled with reinvesting the generated revenue into sustainable initiatives would have a positive impact on the environment, the economy, and society as a whole. It is important for policymakers to carefully consider the design and implementation of the carbon tax and to work with stakeholders to ensure a just and equitable transition towards a low-carbon economy.