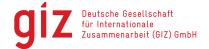


Published by:



As a federally owned enterprise, GIZ supports the German Government in achieving its objectives in the field of international cooperation for sustainable development.

Published by:

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

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Extractives and Development sector programme

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Design/Layout:

stoffers/steinicke, www.stoffers-steinicke.de

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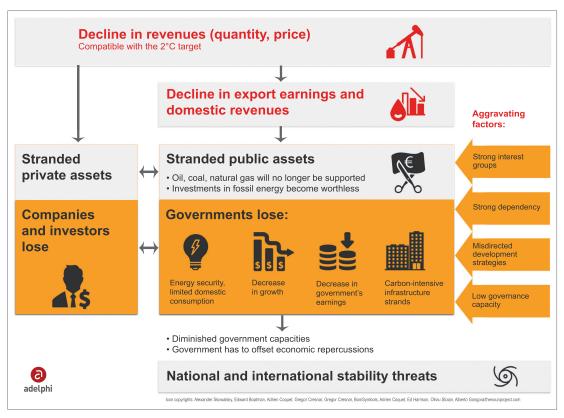
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Berlin, 2017

Executive Summary

With the Paris Agreement, the international community has agreed to limit global warming to 1.5 or 2 degrees Celsius. This goal sets a limit to consumption of fossil fuels: around one third of the oil reserves, half of the gas reserves and over 80% of the global coal reserves will need to stay in the ground. This puts many assets in the fossil fuel sector at risk of *stranding*, that is, of unanticipated devaluation. Decarbonisation will potentially result in many fossil fuel reserves failing to yield the expected revenue because of the decreasing demand and prices for fossil fuels. This entails major risks for **businesses**, **investors and governments**.

Developing countries whose economic and social progress is disproportionately dependent on fossil fuel extraction may suffer particularly severe consequences: a dramatic decline in export and domestic earnings from fossil fuels could impair growth and reduce government revenue, which under certain conditions may jeopardise social and political stability. To contain the costs incurred through stranded assets, states will have to tackle the monumental tasks of low-emission diversification and address important questions concerning management of the fossil fuel sector. **Development cooperation should use its capacities** in the fields of economic and development planning, fossil fuel governance and climate policy in order to take on these challenges.



Overview of effects on various actors if fossil fuel revenues decline and assets strand. Source: adelphi

Economic policy and national development plans

Balancing development and climate action requires a strategic vision for the socio-economic development of countries most at risk. In this regard, reducing path dependencies that support high-risk, high-carbon development models is essential. The following measures are of great importance for developing countries:

- Incorporate climate-policy requirements in the public macroeconomic and development
 planning: Revenue from the fossil fuel sector can be invested for climate-friendly and long-term
 purposes. Countries can also reduce the risks of stranded assets by assuming lower fossil fuel prices
 and extraction rates in their macroeconomic development and investment planning.
- Climate-compatible diversification: It is preferable to invest in low-emission and thus sustainable assets such as education than to invest in developing the value added chain of fossil fuels.
- Nationally Determined Contributions (NDCs): The NDCs should take into account the planning processes and strategies of all sectors of the economy and involve the fossil fuels and finance sectors more closely in particular.

Fossil fuel governance

Development cooperation has a major role in supporting optimal utilisation of revenue generated by the fossil fuel sector and the preparation of the sector for a global transition. There are the following entry points:

- Sustainable sector strategies: Devising a sustainable sector strategy requires a careful and comprehensive analysis of fossil fuel extraction costs and of expected revenue.
- Thorough assessment of new investments: Established producers should thoroughly (re-)assess
 plans to invest in fossil fuel extraction. In the emerging producer countries, it is important to prepare
 now and to take appropriate decisions concerning extraction rates, infrastructure development and
 institutional capacities to embark on low-carbon, low-risk paths and avoid future hard transition
 shocks.
- **Shadow prices:** Applying shadow prices helps to account for the probable future costs of greenhouse gas emissions in investment planning.
- Support effective revenue management and emission mitigation approaches: Managing revenues effectively and reducing emissions from fossil fuel production help to maximise its development benefits in the 2-degree world.

Align fossil fuel and climate governance at international level

The perspectives of the fossil fuel sector and of climate governance need to be brought together to promote a climate-compatible, low-risk transformation of the global economy in order to prevent negative geopolitical consequences. There are numerous forums for international dialogue appropriate for this purpose. The following steps could support the alignment of fossil fuel and climate governance:

- Tackle contradictions between climate and fossil fuel governance: The conflict between a fixed carbon budget and unfettered fossil fuel extraction needs to be resolved in international political processes, so that national strategies can bear fruit.
- Address the issue of fairness: There should be a high-profile public debate on climate justice
 regarding historical responsibilities and different transition capacities in the context of stranded
 assets.
- International climate politics: Clear climate-policy signals by the UN Framework Convention on Climate Change and country groups such as the G20 remain of essence to enable low-risk transition processes.
- International development politics: Stranded asset risks should be considered in development policy processes at UN level (e.g. SDGs, UNEP Green Economy & Finance Initiatives) and in ODA donor forums (e.g. OECD, multilateral development banks, G7).
- **Bilateral and regional initiatives:** Bilateral and regional initiatives such as North-South or South-South partnerships should take up the issue of stranded assets.



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