

What makes a "credible alternative" credible?

Principles for fossil fuel vetting in development finance

Summary

- A credible alternative requires an actual project with similar timelines, cost, and energy service.
- A simple tiered approach would best meet the policy's intended balance of climate and development goals.
- The World Bank's recent experience with a similar approach shows the substantial risk of getting the process wrong.

Context. In a bid to accelerate international climate action, the US Treasury and US Development Finance Corporation (DFC) have announced support for restrictions on development finance for downstream gas infrastructure. Treasury's proposed guidelines mirror an earlier World Bank approach to coal, allowing finance for downstream gas for power only in IDA-eligible (i.e., poor and capital-constrained) countries, where the projects have substantial development benefits, and where no **'credible alternative'** exists.

Now comes the hard part: What makes a 'credible alternative'? And how should development finance institutions confirm whether one really exists? Any vetting process should reflect the purpose of the policy (to provide an objective analysis of whether a cleaner solution is feasible in a given situation) without blocking or slowing highly developmental projects.

Four guidelines for determining a "credible alternative"

- 1. A realistic alternative project should exist. An actual feasible option not just a hypothetical project must be reasonably available on a similar timeline. If a proposed gas project is denied without another project to fill its role, that is simply not a credible alternative and everyone loses. Any analysis, in sequence, should:
 - Start with the pipeline: Are there renewable projects in the pipeline that could realistically be financed and built over the same time horizon and serve a similar function as the proposed downstream gas project?
 - o Talk to the developer and host country reps: Why has the developer chosen to advance a gas deal, and have they considered alternatives? What is the host government's perspective on why gas is necessary and/or preferable?
 - Analyze the market: Have alternative projects been financed in this (or very similar) market/s at adequate scale, and did they move quickly enough to suggest that such a project could be completed in this instance on the necessary timeline?
- 2. Alternatives must provide a similar service at a truly comparable cost. Any analysis must ensure that the credible alternative fulfills the role a proposed project is meant to

energyforgrowth.org

play in the future of a country's power system and its development trajectory. This includes:

- Timeliness: Alternatives would need to be completed on similar time scales. A shovel-ready project is not the same as one many years away. In some cases, emergency power may be required and whatever can be brought online the quickest is preferable.
- Dispatchability: One megawatt (MW) of firm power capacity is not the same as one MW of variable power. A large wind project can provide cheap power, but it can't always perform load-following operations or balance voltage fluctuations.
- No misuse of LCOE: Cost estimates must compare the specific details of the
 project against those of another specific project, not simply average levelized
 cost of electricity (LCOE). LCOE <u>shouldn't be used to compare across</u>
 <u>technologies</u> with different use-cases or across different geographies. Pricing of
 wind, solar, or gas supply can vary wildly with geographical location, climate,
 and market conditions.
- Reasonable storage and overbuild assumptions: Basic analyses of the potential for zero-carbon solutions are sometimes based on assumptions that don't match local needs. Estimates for "solar plus storage," for instance, routinely assume four hours of storage and often do not include over-capacity generation needed for charging.
- 3. Consider the existing infrastructure and a project's systemic effects. Any technology requires specific supporting technical and human infrastructure. Gas-to-power needs significant pipeline infrastructure and, typically, access to international markets. At larger scales, variable renewables require ancillary services such as detailed weather forecasting, high-accuracy next-hour and next-day demand forecasting, and utility-scale storage capabilities. Analysis of a renewable alternative to gas should confirm whether existing infrastructure and sector capabilities are sufficient to successfully manage the proposed influx of variable power. If complementary investments are required for the alternative, this must be considered in the analysis.
- 4. Quantifying emissions cost should account for long-term emissions avoided.

 Unabated gas projects produce emissions, but in many instances, they can replace dirtier burning fuels in existing plants or generators and, when part of a broader plan, help to build more flexible systems that ultimately enable greater renewables deployment. For example: Power Africa quantified the emissions benefit from helping Ghana switch from heavy fuel oil to natural gas.

A warning from recent history: How to avoid another Kosovo

Starting in 2010, the World Bank implemented a very similar process requiring an assessment of "viable alternatives" before financing coal power. A Kosovo coal plant, first proposed in 2006, dragged on through at least three analyses before the World Bank finally pulled out in 2018, claiming that "renewables have now come below the cost of coal," but without releasing its final analysis. Fifteen years later, no alternative power plant was ever built in Kosovo. The World Bank never funded a single coal plant under this policy.

energyforgrowth.org 2

Credible alternatives analysis cannot impede high-impact projects or become a delaying or blocking tactic

To avoid a repeat of a flexible policy on paper that becomes a ban in practice, the analysis should:

- Tier the vetting process for efficiency: To better prioritize time and effort, countries could be categorized based on market readiness, allowing fast-track approval in nascent energy markets where renewable solutions at larger scales are still rare (e.g., Sierra Leone or Haiti), while applying more rigorous analysis to more mature markets (e.g., Sri Lanka or Kenya).
- **Keep it simple:** Market and technology analyses need not become so detailed, lengthy, cumbersome, or costly that they clog the project pipeline or dissuade staff or developers from pursuing quality projects.
- Staff-up smart: Done right, a credible alternatives analysis will take significant time and expertise. Ensure sufficient dedicated and trained capacity (either in-house or contracted) to conduct it, and provide them with clear and consistent guidelines.
- **Be transparent:** The process for assessing credible alternatives and making financing decisions should be made public, and convey clear and consistent expectations to host governments, developers, and investors.

Conclusion

A credible alternatives analysis is becoming the preferred policy option to create incentives for greater renewable energy over downstream gas, while also leaving flexibility when no better options exist. Getting that analysis right could help to enable power provision in countries with severe energy needs. Getting it wrong would deepen energy poverty.

energyforgrowth.org 3