

Comment on Discussion Paper No. 2018-15 “Improving quality of life through sustainable energy and urban infrastructure in Africa” by Shingirirai S. Mutanga, Rainer Quitzow, and Jan Christoph Steckel

The manuscript discusses the role of the G20 for supporting low carbon development challenges in Africa. Some readers might ask, shouldn't large middle income countries (MICs), which are outside the African continent, be discussed instead? In fact, as the authors point out, Africa is experiencing rapid economic and population growth. At the same time, current infrastructure decisions in these growing economies will have a long lasting effect on energy use. The authors convincingly argue that the time to act is now and the G20 can play a larger role in supporting African countries to deal with the dual challenge of achieving economic development with sustainably generated energy.

Four measures for G20 policy support are suggested in the manuscript. I comment on three of these measures and provide a general recommendation at the end.

Comments

1. MEASURE 2: According to the authors, African countries could benefit by building up low carbon energy infrastructure. Such a strategy is promised to offer “opportunities for economic advancement and indigenous value creation”. This sounds quite optimistic. It would be interesting to know, which opportunities and value creations are available compared to the counterfactual of a high carbon energy infrastructure scenario.
2. MEASURE 2: Claims such as “the expansion of the electricity grid and promotion of off-grid electricity services will have to proceed hand in hand” sound smooth at first but are highly problematic for policy makers eventually. There is a growing literature on the limited development effects of rural electrification (Burlig and Preonas, 2016; Lee et al., 2016), with a suspected higher payoff for development by investing in grid reliability in urban centers. With limited resources, policy makers have to prioritize. Feeding-in renewable energy into existing, notoriously unstable grid infrastructure appears to be a difficult additional challenge. There is a clear trade-off involved for LICs and MICs and it is not clear what the role of G20 support could be.
3. MEASURE 2: Improved cooking stoves are not getting enough attention? I disagree, there are plenty of initiatives and plenty of academic literature dealing with this topic (for a review see Lewis and Pattanayak (2012)).
4. MEASURE 3: It is widely agreed upon, that fossil fuel energy subsidies are economic nonsense, environmentally harmful and distributionally regressive in LICs and MICs. But it does not mean, the abolishment would not hurt the poor. Subsidy removals might best be accompanied with social transfer programs to buy political support (Clements et al., 2013). This is a policy recommendation that might be more feasible than investing in low carbon infrastructure, which might be distributionally regressive as well. In the absence of well-functioning income tax and social security systems, targeted cash transfers would be the preferred option. Here is another clear role for the G20 to support the development of these schemes, possibly also by building upon best practice examples such as the Prospera system in Mexico.
5. MEASURE 3: To me, it is unclear what the definition and recommendation for “policy de-risking” is. This should be clarified.
6. MEASURE 4: Honestly, this section is way too general to be useful for policy makers. I find similar texts in UN reports etc. and have difficulties understanding what exactly the implications are. Being more specific with some backup from the literature would help.
7. GENERAL: Since the target audience for this paper should include at least staff from G20 policy makers, clear cut policy recommendations are important. In some cases, e.g. suggesting to

remove fossil fuel subsidies, the text is clear. In other cases, the text remains fairly general with plenty of interpretation needed what the authors exactly recommend. I got lost a couple of times reading the manuscript, reading some passages two or three times. This a bad sign, because policy makers, their staff and researchers as well have little time. To get the message across, I recommend trying to be as specific as possible and avoid general claims e.g. that the G20 and African leaders should address the needs of the poor. They already know that.

References

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