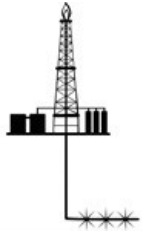


## Fracking tax 'will promote renewable energy'

One way of mitigating the negative effect of fracking for shale gas in the Karoo would be to impose a small tax on it for investment in renewable energy infrastructure and production, a paper published by the Institute of Security Studies (ISS) has suggested.



This scenario would involve a lower level of shale gas production than a boom scenario while also delivering more energy overall, reducing carbon emissions and causing less damage to the environment in the long term.

This approach, the authors argued, would allow South Africa to benefit from its shale gas reserves, believed to be the eighth largest in the world, while limiting the negative consequences of its exploitation and reducing South Africa's dependency on environmentally harmful coal as a source of energy.

The authors of the ISS paper - Steve Hedden, Jonathan D Moyer, and Jessica Rettig, researchers at the University of Denver, Colorado - emphasised that the decision to frack would require major trade-offs between growth and environmental protection.

If done correctly fracking could be used to move South Africa towards a greener future, but the excessive exploitation of shale gas would drain too much of the Karoo's scarce water resources.

The researchers tried to strike a balance between South Africa taking advantage of shale gas reserves in the shorter term while protecting its natural resources and environment in the long term.

Permits for companies to begin exploration for shale gas in South Africa have not yet been issued by the Department of Mineral Resources, which is still finalising technical regulations.

Draft regulations were published last October for public comment for a month.

The government has decided that it will take a 20% free carry in all new oil and gas projects, and reserve the right to buy another 30% at market-related rates. It could potentially have a 50% stake in such projects.

The authors of the ISS paper warn that while the development of shale gas could be a game-changer for the country, the possible environmental effects such as the use of scarce water resources, water contamination, the destruction of natural habitats and an increase in earthquakes could also be "devastating".

The authors propose an excise tax on the production of natural gas from fracking, in addition to standard energy taxes.

The transition tax - beginning at R0.05 per million cubic feet of gas produced in 2017 and ramping up to R0.30 by 2050 - would be invested in renewable energy production and infrastructure.