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This study examines how increasing ICT penetration in sub-Saharan Africa (SSA) can contribute towards environmental sustainability by decreasing CO₂ emissions. The empirical evidence is based the Generalised Method of Moments and forty-four countries for the period 2000–2012. ICT is measured with internet penetration and mobile phone penetration while CO₂ emissions per capita and CO₂ emissions from liquid fuel consumption are used as proxies for environmental degradation. The following findings are established: First, from the non-interactive regressions, ICT (i.e. mobile phones and the internet) does not significantly affect CO₂ emissions. Second, with interactive regressions, increasing ICT has a positive net effect on CO₂ emissions per capita while increasing mobile phone penetration alone has a net negative effect on CO₂ emissions from liquid fuel consumption. Policy thresholds at which ICT can change the net effects from positive to negative are computed and discussed. These policy thresholds are the minimum levels of ICT required, for the effect of ICT on CO₂ emissions to be negative. Other practical implications for policy and theory are discussed.

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