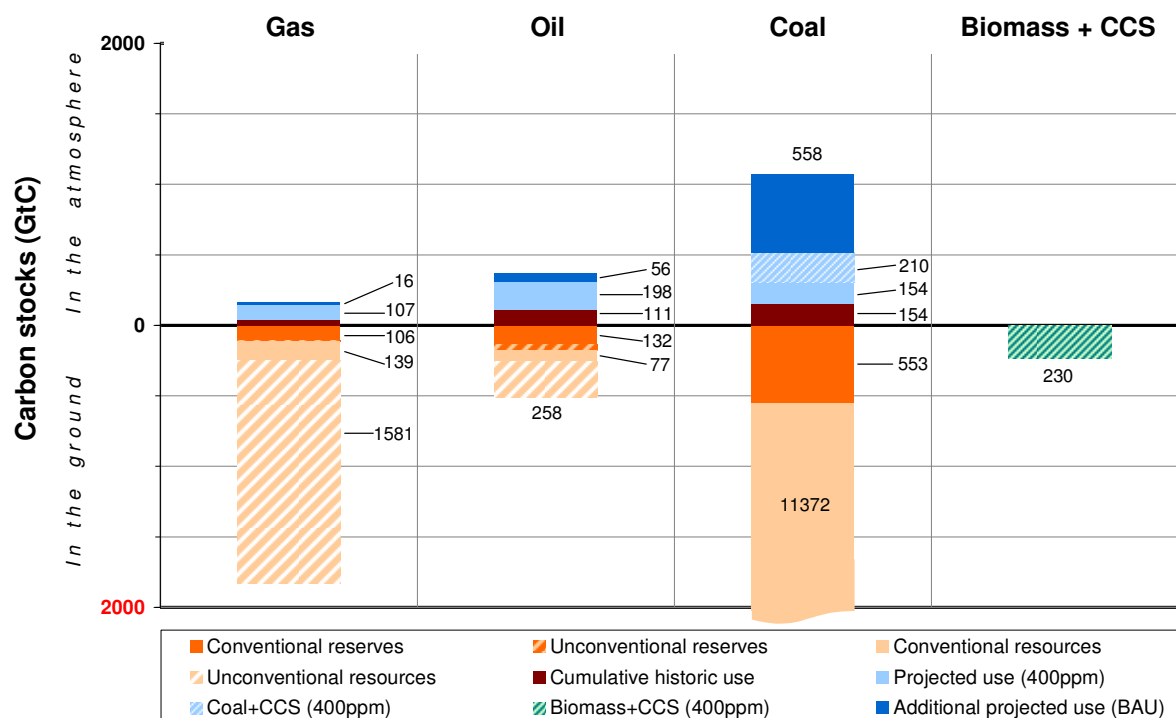


Stocks of carbon in the ground and in the atmosphere

Matthias Kalkuhl* and Ottmar Edenhofer

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Cumulative historic carbon consumption (1750-2004), estimated carbon stocks in the ground, and estimated future consumption (2005-2100) for business-as-usual (BAU) and an ambitious 400-ppm-CO₂-eq. mitigation scenario. Carbon capture and sequestration technologies (CCS) reduce emissions of coal combustion near zero and lead to negative emissions in combination with biomass combustion (in total 440 GtC are stored underground by CCS which would be emitted additionally in the BAU scenario). Fossil energy stocks are converted to carbon dioxide emissions by using emission factors from IPCC (2006). *Sources: Reserves: BGR 2009; historic consumption: Boden et al. 2009; scenarios: Edenhofer et al. 2010.*

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* Potsdam Institute for Climate Impact Research, Potsdam, Germany. kalkuhl@pik-potsdam.de .