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A Single VAM Project can be Like Removing 2 Million Cars Off the Roads - at USD 7 per tCO_2e

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Abstract

The atmospheric content of GHG (GreenHouse Gases) is only around 0.04%. Without them, the Earth would have been a frozen planet. Due to the tiny portion of GHG, the anthropogenic emissions since the second half of the 1800's have been causing Global Warming and Climate Change. To the scientific community, this is since a long-time crystal clear. Yet, effective measures still remain to be implemented.

According to the statistics of the IEA (International Energy Agency), global energy production increased from 1990 to 2021 by around 65%. Despite global concern and commitments (such as the Paris Agreement of 2016), the portion of fossil-based energy remained through the increase at 80% and the portion of coal-based energy remained around 30%.

When a coal seam is excavated, methane gas is released. Methane in air is explosive in concentrations between 5% and 15%. For safety reasons, ventilation air is forced through the mine to dilute the methane to typically below or much below 1%. Safety is obtained, but at the cost of a massive methane emission to atmosphere. A single, large shaft can annually emit 50 thousand tons or more. Financial drivers in form of a value (gain a revenue or avoid a penalty) to reduce the emissions are required to trigger project implementation.

This presentation ventures into the necessity to address major reductions of methane emissions to the atmosphere in parallel with emission reductions of CO_2, in order to have a better chance to cope with climate change in time, and how VAM Mitigation can play an important role as a large impact at a comparatively low cost. It outlines why VAM Mitigation as a climate action is a particularly Low Hanging Fruit.