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Political and technical issues of coal fire extinction in the Kyoto framework

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It is a highly desirable effort to extinguish as much coal fires as possible in short time to prevent large losses of energy resources and to minimise CO2 and other exhaust gas releases from such sources. Unfortunately, extinguishing coal fires needs massive financial investments, skilled man power, suited technology and a long time. Even mid to small scale coal fires need several months of extinguishing measures and of monitoring time after extinction resulting in expenditures of a minimum of several hundred thousand Euros.

Large companies might be willing to spend money for coal fire extinction measures but smaller holdings or regional governments might not have the monetary resources for it. Since there is no law in China that demands coal fire extinction, measures under the Kyoto framework may be applied to sell CO2 certificates for prevented emissions from extinguished coal fires and thus used as a financial stimulus for coal fire extinction activities.

The set-up for methodologies and project designs is especially complex for coal fire extinction measures and thus for necessary exploration, evaluation and monitoring using geophysical and remote sensing methods.

A brief overview of most important formal and technical aspects is given to outline the conditions for a potentially successful CDM application on coal fires based on geophysical observations and numerical modelling.