

**LETTER TO THE EDITORIAL STAFF
FROM R.D. (OLAF) SCHUILING,
MEMBER OF THE EDITORIAL BOARD**

I am working hard at spreading the olivine concept. As I am spending less and less time on mineralogical/petrological issues it is probably better if I resign as member of the editorial board. As a farewell present, herewith a short note on the geopolitical issues around climate change. Maybe it is of interest to somebody.

With best regards, Olaf SCHUILING

The Global Climate Stalemate (Abstract)

Kyoto, Rio de Janeiro, Bali, Copenhagen and Cancun have produced many words, but little action. The Western industrialized world and the emerging economies have opposite views and interests, and do not move from their positions. The West insists on emission reductions, backed up by carbon capture and storage (CCS).

The priority of the emerging economies, with China, India and Brazil in the frontline, supported by S. Africa and Indonesia, is on economic development and raising the standard of living for their people. The foremost requirement to achieve this is the availability of cheap and abundant energy. The mentioned nations all possess large coal reserves, so their choice is obvious.

There is a promising way out of this stalemate, which opens the way to stabilization, and ultimately even to reduction of the CO₂ levels of the atmosphere, and to a reconciliation of the opposing sides. The West should accept, while opting themselves mainly for emission reductions, that the emerging economies follow a different path, but with the same effect against climate change. They all possess huge deposits of the mineral olivine. This mineral, when exposed to the atmosphere, reacts fast with CO₂ and water, particularly in wet tropical climates. By this weathering reaction the greenhouse gas CO₂ is transformed into an innocuous bicarbonate solution. Rivers transport these solutions to the oceans, where the bicarbonate is captured in solid form as limestones and dolomites. These rocks are the ultimate sustainable storage of CO₂.

By mining and milling olivine and spreading it over farmland and plantations, combined with the addition of biochar, and over beaches, tidal flats and shallow seas the emerging economies can compensate their emissions. In doing so, they don't have to slow down their economic development and can still make a huge contribution to mitigate climate change. This "olivine option" is considerably cheaper than the capture and storage of CO₂ from coal-fired power plants, cement factories, oil refineries or fertilizer plants. As it is the same process of weathering that has operated throughout the geological history of the Earth, there will be no negative effects on the environment.

Team of Mineralogical Journal (Ukraine) is grateful for the attention that Dr. Olaf Schuiling paid to his work in the editorial board. Despite the long distances and costs, he found time to participate in the meeting of the Editorial Board in Kyiv, was a regular contributor and reviewer of the magazine. Within several years we have worked together to improve the quality and ranking of Mineralogical Journal (Ukraine). Thank you, Dr. Olaf Schuiling, for fruitful cooperation!

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