Methanol economy and Development and Climate Alliance

(brief description)

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Parts of our society are moving into panic mode in view of developments in the energy and climate sector. Climate hysteria has been chosen as the word of the year 2019 in Germany. Some politicians are pursuing almost planned economy solutions, such as the implementation of electromobility via regulation and massive specifications for the energy-efficient renovation of buildings, all while neglecting cost-benefit considerations. Our country is threatened with a considerable loss in prosperity and significance. This is not a sustainable approach. What should be done instead?

A wise solution is to promote the **methanol economy** as the key to a growth-compatible and prosperity-promoting solution to the global energy and climate crisis. It expands current renewable energy solutions to include **carbon neutral synthetic fuels**. These offer great potential if considerable amounts of cheap desert electricity from the Earth's sunbelt are available to produce cheap green hydrogen via electrolysis, which is combined with CO_2 to form methanol (at reasonable costs). Methanol is as easy to handle as petrol, but less toxic, it can replace all current types of fuel and heating oil through further processing steps (e.g. methanol-gasoline) - and it is carbon neutral.

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The huge storage and handling problems of renewable energies of today are thus elegantly solved. By recycling the carbon four times in the context of a methanol economy, global CO_2 emissions in the energy sector are reduced to only about 10 billion tons/year (standing at 34 billion tons/year today), despite considerable economic growth processes which in turn are both to be expected and needed. The fossil sector alone could make the necessary investments. This sector thus retains its economic basis. Efficiency issues are of lesser importance in this context if solar power can be provided in sunbelt deserts for a final price of less than 2 eurocents/kWh.

Massive afforestation, especially on degraded soils in the tropics, **humus formation** in agriculture (also in semi-arid areas) and **robust protection of rainforests** can make soils a carbon sink for the remaining 10 billion tons of CO_2/year as an important complementary strategic element. Overall, the carbon cycle is thus closed. At the same time, this approach increases agricultural productivity, allows for the feeding of about 10 billion people by 2050 and creates large numbers of jobs in the Global South. A world in prosperity with 10 billion people becomes possible. International forest and agricultural projects are central to BMZ's Development and Climate Alliance. In this context one also speaks of **nature-based solutions**.

The **Development and Climate Alliance** of the Federal Ministry for Economic Cooperation and Development (BMZ) was founded in 2018. BMZ encourages all non-state actors to commit themselves to a better future through voluntary (co-)financing of effective projects in non-industrialized countries. On the one hand, the projects funded are intended to contribute to global development in line with the United Nations' Sustainable Development Goals (SDGs), thus contributing in particular to a slowdown in world population growth. On the other hand, they also have a positive impact on the global carbon balance. The funding of the projects is usually of a "non-repayable grant" type if one only considers the monetary side of one's commitment. However, regarding

non-financial benefits for the donors there are multiple positive effects in terms of shaping a positive future and possibly promoting their own reputation. If the activities are suitably designed, actors can position themselves towards **carbon neutrality / carbon negativity**.[2] The Alliance now boasts almost 500 supporters. A prominent one is the large manufacturing company Bosch. Bosch will be carbon neutral from 2020 on.

Development and climate protection need no longer be contradictory. Just as the invention of the steam engine more than 250 years ago unfolded the potential of coal to massively increase prosperity, the solar potential of large deserts (Desertec 2.0) will be key to getting humanity out of the current energy and climate impasse. This will be achieved above all by combining renewable sources of electricity and synthetic carbon neutral fuels (e.g. in the form of a methanol economy). All-electric solutions are not sufficient but lead to a massive loss in prosperity instead. Such loss in prosperity also directly improves the carbon balance but is not a viable policy for the majority of people.

Information on the Development and Climate Alliance can be found at *https://allianz-entwicklung-klima.de/mitmachen/*

References:

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[2] Carbon negativity is sometimes referred to as climate positivity or carbon positivity. All three terms mean going beyond achieving net zero carbon emissions to actually removing more carbon dioxide from the atmosphere than one emits.