

## Systematic recycling of CO<sub>2</sub> via methanol (CH<sub>3</sub>OH) using the example of 'power stations + vehicles'

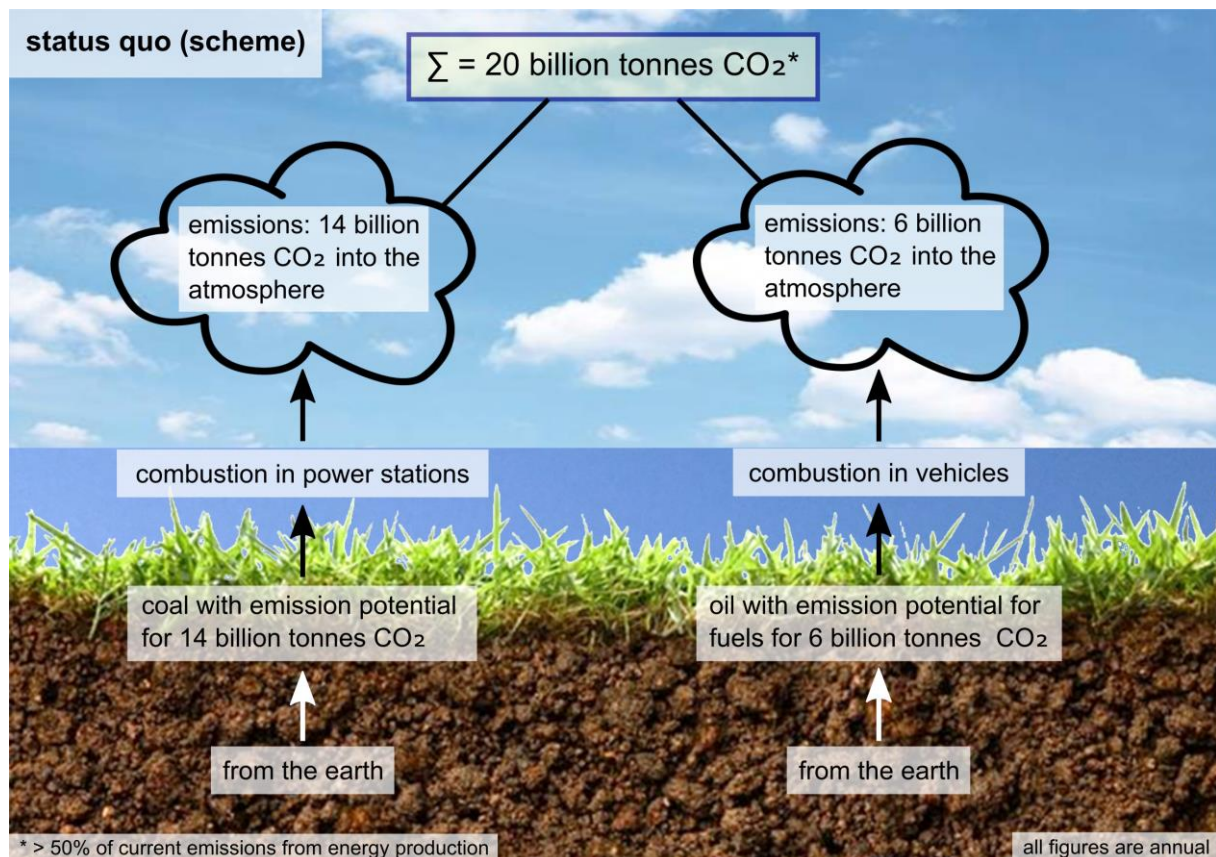
The effect of using carbon capture and usage (CCU) in power plants using green methanol and the effect of methanol-based synthetic fuels for internal combustion vehicles will be demonstrated using a hypothetical, simplified example. The result is a climate-neutral overall system.

### Status quo (scheme)

Emissions of 14 billion tonnes of CO<sub>2</sub> per year from coal-based power plants.

Emissions of 6 billion tonnes of CO<sub>2</sub> per year from traffic based on oil-based fuels.

In total: emissions of 20 billion tonnes of CO<sub>2</sub> per year; more than half of today's global climate change emissions.



## Future (scheme)

Emissions of 6 billion tonnes of CO<sub>2</sub> per year from coal-based power plants are captured and recycled through CCUs.

Emissions amounting to 8 billion tonnes of CO<sub>2</sub> per year from power plants via the combustion of green methanol are captured and recycled via CCUs, i.e. **power plants are climate-neutral**.

Emissions of 6 billion tonnes of CO<sub>2</sub> per year are released into the atmosphere from the traffic area. These are compensated by nature-based solutions, i.e. **traffic is also climate neutral**.

