THE FUTURE OF MATERIALS AND ENERGY



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Carbon Fiber Production



Carbon fiber is already used in some applications.





Carbon + Stone is a new hybrid material replacing steel, aluminum and concrete





PV-facade module with carbon stone frame and glas

High-End loudspeaker from Carbon and German Slate



And many more to come soon...





Illustration: Viviar Roth · vivianroth@gmx.net

Carbon neutrality is being reached by:

- making of the fiber from algal oil
- using focused sunlight for simultaneous fiber + electricity production
- replacement of steel, aluminum and concrete by carbon fibers + minerals
- separation of carbon and minerals after use
- storage of solid state carbon underground
- leading over time to **carbon negativity** since we make the material out of CO_2



The energy necessary for production of environmentally friendly carbon materials will be provided by focused sunlight <u>directly</u>

products will range from:

- house walls for the building sector
- car manufacturing
- bridge and stairway building
- railway sleepers
- solar powered PV-facades of buildings
- light weight rooftop terraces
- wind power stations and rotor blades
- green house application
- and many more applications

Creation of a basically new paradigm of materials: based on **carbon fiber + electricity** production **by using sunlight** and finally long lasting storage of carbon



The Paris agreement is stipulating:

reduction of greenhouse gas release, especially CO₂

 establishment of CO₂ neutrality by for example enhancing absorption techniques for CO₂ and long lasting storage of carbon

So here is our answer:

- transformation of CO₂ into the production process of building and construction materials
- Further investment to establish readiness for the global markets for new materials by making carbon fibers 65% less expensive than today by direct sunlight production.
- Surplus: Usage of the generated heat for electrical power production



Thank you for Your attention

