

Company Profile

Vision: Reinventing the carbon industry

Carbon is the principal component of energy sources such as crude oil, natural gas and coal and is an important component for the industrial production of goods. Today carbon predominantly stems from fossil resources. Biomass also contains carbon and thereby serves as an energy source or carbon supplier. It grows back again and hence is renewable. Until now it was difficult to efficiently utilize the energy of biomass or to supply the carbon in the biomass at a high quality. SunCoal Industries offers a solution to this problem.

Benefit: SunCoal Industries nutzt den natürlichen Kohlenstoffkreislauf

SunCoal Industries utilizes the natural carbon cycle. SunCoal® is produced from renewable biomass and can substitute fossil coal. In this way no additional carbon dioxide is emitted into the atmosphere. While growing, plants capture carbon dioxide (CO₂) from the atmosphere in the biomass. As the biomass is converted into SunCoal®, the energy from the biomass is transmitted to the SunCoal®. The CO₂ from the biomass will be let loose if, for example, the SunCoal® is used for power generation. The carbon and the energy in the biomass are therefore used in accordance with nature.

Process: SunCoal Industries makes the carbon from biomass usable

The CarboREN®-process homogenizes biomass into coal dust (carbonization), which afterwards is completely dry. In other words, damp biomass (with a moisture content of 20-60%) with a low heating value is converted into dry coal (moisture content of 8%) with a high heating value. The energy efficiency is higher than 90%. Carbonization is a natural process and in nature it takes 50 thousand to 50 million years to complete. The CarboREN®-process accelerates this process to complete in just a few hours. In doing so, from renewable biomass comes coal – SunCoal®.

Product: SunCoal® from renewable biomass

SunCoal® is coal from biomass. SunCoal® can be employed in existing coal power and coal heating power plants just like fossil coal. Moreover, SunCoal® can be refined to renewable synthetic fuels and be utilized as an auxiliary material to soil to increase agricultural fertility. SunCoal Industries delivers the necessary technology.

Company: SunCoal Industries develops the CarboREN®-process in industrial scale

The company develops, builds, and operates plants (Biomass-to-Coal plants) that process biomass to a carbon-rich, dry solid. The company was founded 2007 in Brandenburg (Germany) and has won the founders competition 2008 of the business magazine Wirtschaftswoche. It not only operates a laboratory, but also a small production plant and currently realizes a first plant with industrial scale.