

Welcome to “GreenCoal™,” Torrefied Biomass

GreenCoal™ is a sustainable, renewable carbon neutral solid fuel produced by the torrefaction technology of Terra Green Energy, LLC.

Torrefied biomass has undergone a thermochemical treatment in which it is roasted via a light pyrolysis process, removing most of its moisture and volatile compounds leaving a final product which is solid with many of the same handling and combustion characteristics as coal without coal’s negative aspects. GreenCoal™ contains no mercury, very little sulfur and produces no new carbon dioxide making it extremely environmentally friendly.

The torrefied biomass product retains 90% of its original energy content while significantly reducing its overall volume thereby making each remaining pound much higher in energy content.

GreenCoal™ offers many highly attractive properties in comparison to untreated biomass. In all respects such as heating value, grindability, combustion nature, storage, transport and handling, GreenCoal™ is a superior fuel. Compared to untreated biomass, GreenCoal™ has a significantly higher heating value and, in combination with the high bulk density, allows conventional coal fired combustion units to fire or co-fire a carbon neutral renewable fuel without the expenditure of large sums of capital monies. The fuel’s use provides cost savings in sizing in addition to handling and transportation costs.

GreenCoal™ is much less vulnerable to biological degradation as it is dehydrated during the torrefaction process and thereafter not vulnerable to absorbing moisture. In the future, large volumes of GreenCoal™ will be produced for the large-scale generation of heat and power in order to replace coal with a sustainable energy resource. With respect to large-scale biomass co-firing in coal-fired power stations, GreenCoal™ will offer a solution to grinding issues existing for untreated biomass (e.g. wood chips). Biomass feedstocks are notoriously difficult to grind in the existing coal mills due to their

tenacious and fibrous nature. GreenCoal™ is already composed of small particles and in a coal mill they are readily disintegrated (crushed) into these original particles.