THE ANTHRACITE ADVANTAGE
A FACT SHEET ON ANTHRACITE COAL

What is Anthracite?

All coal is not the same. Anthracite is a highly carbonated form of clean-burning coal that is different from the more commonly known bituminous (soft) coal.

Anthracite was formed during the Carboniferous Age, when the dense green vegetation that thrived during the tropical climate of the time fossilized. **Today, anthracite is the oldest, hardest, and cleanest type of coal**.

Anthracite has been providing even, comfortable heating in homes, schools, hospitals, office buildings, military bases and other institutions throughout the United States and other parts of the world for over 125 years.

Where is it Produced?

All of the anthracite used in the U.S. is produced domestically by American workers. Almost all of the nation's anthracite is found in Northeastern Pennsylvania. There are over seven billion tons of anthracite available for mining. It is a solidly proven fuel source and high carbon reductant that is widely available through established distribution channels. Unlike oil and gas, its availability and pricing are not subject to international politics.

How is it Mined?

Anthracite is primarily mined on the surface by retrieving left-over coal from abandoned, previously deep mined underground sites. Huge shovel-like machines, called drag-lines, dig up coal that is buried in the walls and ceilings of the abandoned tunnels.

Today, anthracite is extracted almost exclusively from previously disturbed sites. After retrieving the coal from the old mines, the land is filled in and reclaimed. The mining companies plant trees and grass and help redirect water flow and restore the surface to its natural state.

What are the Advantages of Anthracite?

As a fuel source, it has many distinct advantages over its more well-known alternatives, such as gas, oil, electricity, cord wood, and wood pellets:

- **Economical**

  Because anthracite is 82 to 86 percent carbon, it burns at a very high level of BTUs -- 25 million BTUs per ton (BTUs, British Thermal Units, are a measure of heat). Its cost-per-million BTUs is significantly lower than the cost-per-million BTUs of gas, oil, electricity, cord wood or wood pellets, making it a much more cost-efficient fuel source.

- **Environmentally Sound**

  Anthracite is more environmentally sound than most other fuels for several reasons:

  - The low sulphur and volatile content in anthracite makes it an extremely clean-burning fuel. Anthracite produces virtually no smoke or particulate emissions, a major problem with cord wood and wood pellet burning stoves. Therefore, anthracite coal stoves can be used as alternatives to wood stoves/fireplaces in areas of the country where wood burning is restricted, due to air pollution problems, or where wood is scarce and expensive.

  - When anthracite is mined, the mining companies prepay the cost of reclamation in the form of "full cost" bonds to the government to ensure reclamation of the land. These bonds, depending on the expected size of the mine operation, can total millions of dollars per location. Additionally, a portion of the price from each ton of anthracite sold goes to a federal fund used to reclaim abandoned mines from generations past.

  - The mined areas are reclaimed by refilling the mine with the non-coal material excavated in the act of mining, returning the terrain to its original contour. Then, trees and grass are planted. Beyond the obvious aesthetic improvements, water can flow properly over the earth rather than through the old, abandoned mining tunnels underneath. This has led to the restoration of flowing streams, creation of natural ponds and wetlands, and a return of wildlife to the area. The surrounding ecosystem is rescued and revived due to anthracite mining and reclamation.

  - Anthracite's full-cycle environmental compatibility is evident in that little waste occurs when using it. For example: it is mined from barren, previously damaged land (which is then restored); all sizes of the mined coal are used; the waste created in processing is burned in co-generation facilities; and its pure, natural cinders and ash can be used to aerate nursery and greenhouse soil.

- **Quality:**

  The level of comfort enjoyed by anthracite heat cannot be equaled by any other fuel. Its even heat flow and high level of BTUs per unit compared to other fuels make anthracite the warmest, steadiest, and most comfortable heat source available.

- **Convenient:**

  As a low-maintenance, self-serviceable form of heating, anthracite belies the coal-burning myths of the past. When anthracite is used as the primary source of heat in a home or business, its modernized furnace, coal-feeding and ash-removal systems require very little effort by the consumer. When used to supplement heat via a coal stove or fireplace insert, anthracite is far superior to cord wood or wood pellets. A stove-full (35 to 50 pounds) of anthracite will heat evenly without tending for over 36 hours.

  Some companies, such as Blaschak Coal Corporation, package anthracite in convenient, white, 40-pound bags -- ideal for use with coal stoves. Another bonus is that there is very little ash to be disposed of and no creosote build-up in the chimney. Unlike wood-burning fireplaces or stoves, the required cleaning time is minimal and in most cases is provided as a service by the dealer.

- **Safe:**

  Because there is no creosote build-up with anthracite, the threat of chimney fires is eliminated. Compared to other forms of supplemental heating, anthracite is virtually risk free. With proper installation, dangers associated with gas and other fuels are no longer relevant. Since the middle 1800's millions of people have used anthracite safely.

How is Anthracite Used?

Anthracite has a multitude of uses as a fuel source:

Residential: Hundreds of thousands of homeowners currently use anthracite and many others are converting to anthracite for home heating. It can be used as a primary heat source or as a supplemental form of heating through coal stoves.

Modern and efficient anthracite boilers, unlike the coal furnaces of yesteryear, make primary heating with anthracite a convenient and cost effective option. To supplement a home heating system, anthracite stoves provide comfortable heating for up to 3,000 square feet of living space. Depending on where they live, homeowners have found that anthracite can save hundreds of dollars a month on heating bills.

Institutional: Many universities, schools, nursing homes, hospitals and even museums save money on heating costs by using anthracite. Case histories demonstrate that anthracite-burning furnaces cut fuel bills nearly in half.

Industrial: Anthracite is used as a heat source, and/or reducing agent in plants and factories in a number of industries. The consistent quality and cost reduction compared to other material choices allows plants to concentrate monies in other areas.

Commercial: Businesses, apartment buildings, banks, airports and ski lodges throughout the Northeast benefit from the economical and environmentally-sound attributes of Pennsylvania anthracite.

Municipal: Municipalities use anthracite for water.

As an abundant, economical and environmentally responsible American fuel, anthracite is quickly becoming the energy alternative for the 21st century and beyond.