

Let the Sun Shine In – BP's Sun Matches What It Feels About the Environment!

An Earth Friendly Oil Company

Look around you. There are logos everywhere. Nike uses a checkmark on its products. CBS has an eye, and the golden arches mark McDonald's. With what other logos are you familiar? One company, BP, has recently changed its logo. It is now a bright yellow and green sun. In fact, their initials used to stand for British Petroleum. This has changed, too. Now BP stands for Beyond Petroleum. These changes show the way BP feels about the environment.



BP is one of the biggest oil companies in the world, and it is a leader in helping the environment. Sir John Browne is in charge of this company. He is very concerned about the link between **greenhouse gas** emissions and weather changes on the Earth. Many scientists tell us that greenhouse gases are responsible for climate changes on Earth. As you've read, we need to reduce the amount of greenhouse gases that we put into our air. The nations of the world talked about this at Kyoto, Japan. Sir John Browne wants BP to reduce their greenhouse gas emissions even more than the amount the nations agreed to at Kyoto. It is his goal that BP's emissions will drop from the 40

million tons of **carbon dioxide** that it put into atmosphere in 1990 to 36 million tons in 2010.

There are other ways that BP is finding to be friendly to the environment. They want to reduce the energy that they use. Besides being good for the environment, reducing energy use saves a company money. In addition, BP is developing other forms of energy such as **solar energy**. They are also working to provide cleaner fuels for people to buy and use.

The employees of BP and Sir John have come up with many ideas to reduce the amount of greenhouse gas that is put into the air, save energy, and ways the company can produce alternative energy and clean fuels. People at BP support their company in becoming a friendlier partner with the Earth.

Reducing Emissions of an Oil Refinery

One **refinery** that BP runs outside of Perth in Australia is working to reduce their greenhouse gas emissions in a number of creative ways. This refinery uses **cogeneration** to supply its energy needs and reduce emissions. What is cogeneration? The prefix *co-* means *with* or *together*. *Generation* means *to make* or *produce*. Cogeneration means working together to produce heat. This working together happens when the wasted heat from a manufacturing process is used to make electricity. This way every possible bit of power is used and nothing goes to waste. (For more information about cogeneration, read the article titled “A School Uses a Different Way to Save Energy: Cogeneration.”)

Sometimes natural gas and oil are found together in the Earth. **Flaring** happens when the natural gas is burned off and oil is left. Carbon dioxide is emitted into the air. Flaring took place a lot in the 1970's. Some companies even burned the gas on purpose because they were too far away from gas pipelines! Most companies are trying to be more careful about this now. They don't even want accidental flaring to occur. The refinery in Australia is working hard to make sure flaring doesn't happen.

This refinery is growing, but they have been able to cut their own use of energy by using less gas, electricity, and steam. In fact, they have been able to reduce their greenhouse gas emissions by 27 percent because they have been more careful about their energy use.

The Western Australia Department of Agriculture has helped the refinery to use **carbon sequestration** and to change land use. Trees need and use carbon dioxide, so by planting trees near places that emit carbon dioxide, the trees can use this gas. This cuts down on the amount of carbon dioxide that is emitted into the air.

By using cogeneration, reducing flaring, saving energy, and forest sequestration, BP's Australian refinery is one of the most environmentally friendly refineries in the world.

Using Sun Power



BP Solar is a part of BP. Just as the name suggests, BP Solar is a leader in developing solar power. They manufacture **photovoltaic** cells that are made of silicon and change sunlight to electricity. At the BP Solar Fairfield Facility in California, a very thin semi-conductor panel is made. This thin panel is called Apollo. It is hoped that Apollo will provide inexpensive solar energy to homes and businesses.

Besides making solar products, BP uses a lot of solar energy in its own buildings. They use solar systems in their company buildings and their platforms in the oceans to drill for oil. They also have a program called "Plug in the Sun." This program

uses solar panels on the roofs of new gas stations around the world. BP believes that solar energy is an important **renewable energy resource**.



Making Fuels Cleaner

In 1999, BP started a program to put cleaner burning fuels in certain cities around the world. They wanted to concentrate their efforts first on cities where air quality was a problem. Looking at the local needs of the cities is important to BP. They offer different types of clean fuels in these cities depending on the problems that need to be solved. Cities may get various **alternative fuels**. Some of the cities that are getting these cleaner fuels are Atlanta, Krakow, Warsaw, and Istanbul.

Thinking About It

As you have learned, there are many pollution problems, but much can be done to solve our problems. BP is a company that tries to conserve energy, use environmentally friendly techniques such as cogeneration and sequestration, and develop renewable energy resources. As their new name suggests, they are looking for ways to power the world that are “Beyond Petroleum.” What would happen if more companies took their responsibility toward the environment as seriously as BP does?

You're an Expert!

Make a list of the good environmental practices of BP. Do one of the following activities:

1. Imagine that you are a newspaper reporter. Write a feature article for your paper detailing what BP is doing to improve its environmental practices.
2. Imagine that you are a television reporter doing a story for a program like 60 Minutes or 20/20. Tape a segment highlighting BP's environmental practices.
3. Imagine that you are the Director of Public Relations for BP. Design and make a pamphlet showing the good environmental practices of your company.