

How We Use Energy

Rising energy prices impact U.S. consumers in obvious and not so obvious ways

With the national debt soaring to more than \$14 trillion this year and the country's unemployment rate at 9.1 percent in August, there is no doubt the U.S. economy is struggling.

The increasing price of energy—electricity, natural gas, and oil—further stresses the shrinking budgets of American businesses and households. For those over 65, on fixed incomes or who have lost their jobs, volatile energy prices mean even greater financial hardship.

While the end users of energy can be divided into three categories—home and work, transportation and industry—each of these groups are interrelated and interdependent.

The price of a loaf of bread is impacted by the rising cost of fertilizer to grow the wheat, the electricity to run the machines that process the grain into bread, the fuel that powers the delivery truck and the electricity to power the lights and computers at the grocery store.

Higher energy costs in each of these areas are passed on to consumers at the checkout stand.

At Home and Work

In 2008, 41 percent of all energy consumed in the nation went to power commercial buildings and homes. Heating accounted for the largest energy expenditure.

The cost of electricity is expected to rise as U.S. utilities face major environmental regulations between 2011 and 2020, including those under the Clean Air Act, the Clean Water Act and the Resource Conservation and Recovery Act.

Anticipated regulations by the Environmental Protection Agency will collectively impose the largest expense on the electric power sector in its history.

In the Northwest, the Bonneville Power Administration has raised rates for its preferred customers including NWCPUD under its new contracts effective October 1, 2011.

The price of energy impacts everything from the cost of a gallon of milk to the electricity that powers the heaters, lights and computers in our homes, schools, commercial buildings and hospitals.

Transportation

The United States uses 28 percent of its energy resources to move people and goods from place to place.

With the total miles driven by Americans expected to increase by 40 percent during the next 20 years, the demand for fuel will continue to increase. Higher prices at the pump translate into less money in the consumer's wallet for goods and travel—a trend that can be devastating to small businesses and the economy.

Nearly all of the consumer goods in the nation are delivered by truck—from the food we eat to the clothes we wear and the packages we send.

The trucking industry projects it will spend more than \$37 billion more on fuel this year than in 2010. Not surprising, those increased costs will be felt by consumers at the cash register.

Airline travel also will get more expensive. Passenger and cargo airlines expect to spend \$53 billion on fuel in 2011, up from \$39 billion in 2010.

Industry

In 2006, one third of the nation's energy use went to industry.

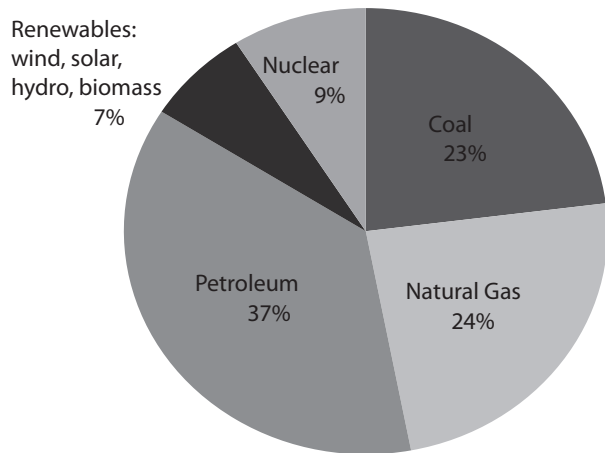
Every product made in the country requires the use of energy in its production. Unfortunately, since energy prices began

What Will It Take? Powering America's Future

"How We Use Energy" is the first in a series of articles from Northern Wasco County PUD about the current state of the energy industry in America and what is needed to move the nation forward to a powerful future.

Part 2 of the series continues next month with a look at the advantages and disadvantages of how energy is generated in the United States.

Sources of U.S. Energy Consumption, 2008



to rise in 2000, the nation has lost more than 5.5 million high-wage manufacturing jobs. Much of this loss is attributed to the cost of energy.

The chemical, forest products, petroleum refining, aluminum, glass, metal casting, mining and steel industries use about 75 percent of the energy in this category.

For example, the chemical industry relies on natural gas to heat and power their facilities as well as using the raw material to create products and processes that Americans use every day.

With an estimated 40 percent to 60 percent of the world's food production reliant on the use of fertilizer, the rising price of natural gas used to produce ammonia—an essential ingredient in most nitrogen and finished phosphate fertilizers—is another concern threatening adequate supplies of food essential to feed a growing global population.

U.S. manufacturing is especially vulnerable to the volatility of the petroleum market as it uses 22 percent of all petroleum in this country.

Currently, the United States depends upon foreign sources for two-thirds of oil supply.

Moving Forward

There is no simple answer for the

nation's economic difficulties. Even as we increase energy efficiency and the use of renewable and alternative energy sources, the United States will remain dependent on oil and natural gas to meet growing energy demand at least for the next several decades.

Federal funds and policies that support research and development are essential to encourage innovation for both the development of new energy resources and to maintain production of conventional sources.

With so many businesses and citizens affected by the cost and supply of oil, natural gas and electricity, the United States needs a national energy policy that encourages dependable, adequate supplies of power at stable, affordable prices.

As a public utility, these are the same tenants NWCPUD has stood by throughout its history: How will the utility's decisions impact its customers and at what cost?

Before exploring the components of a successful national energy policy, next month, in the second part of our series, we will look at the current energy resources in the United States—coal, natural gas, nuclear, petroleum and renewables—and the advantages and disadvantages of each. ■

NORTHERN WASCO COUNTY PUD

COMMUNITY CALENDAR

October 2

P.E.O. Tour of Homes.

Visit six homes with styles that range from Victorian to contemporary during this benefit event for P.E.O. Women's Scholarships, 1 to 5 p.m. Tickets \$10 at Klindt's Booksellers or at homes on day of tour.

For details and locations for homes on the tour, go to columbiariverproperties.com.

October 8-9

Gorge Community Celebration.

Free, family-friendly event at the Columbia Gorge Discovery Center and Museum includes live music, art, education, bike tours, local foods, brews and wines.

For details, call 296-8600 or go to gorgediscovery.org

October 11

Harvest Moon Walk.

Free one-hour interpretive walk on The Dalles scenic Riverfront Trail. Event begins at 6:30 p.m. at the Columbia Gorge Discovery Center and Museum.

October 25

Northern Wasco County PUD Board Meeting.

6 p.m., 2345 River Road, The Dalles.

October 31

Downtown Trick or Treat for Kids.

Downtown merchants open their doors to young ghosts, goblins and action heroes at this annual Halloween event, 3 p.m. to 5 p.m., downtown The Dalles.

Nonprofit organizations with events in the PUD's service districts are encouraged to promote their activities.

To list an item in the community calendar, please call 298-3302. ■