

Direct Use: A Better Way to Use Energy

Natural Gas. A clean burning, efficient, affordable source of energy... AND... we produce most of what we need right here in the United States.

Is natural gas the final solution for our energy needs? No.

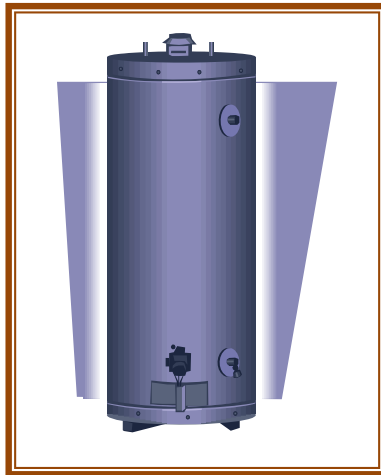
Natural Gas IS the product that can meet our current energy needs until the next breakthrough source of energy evolves. Therefore, as a nation we must use natural gas as efficiently as possible. Directly using natural gas in the home or business will conserve natural gas overall, reduce carbon emissions, and reduce the consumer's overall energy bill.

The "Direct Use" of natural gas means burning the gas in the home in the final piece of equipment instead of burning the gas in a power plant and transporting it across electric transmission and distribution lines to the home to be used in the final piece of equipment.

27% - Only 27% of the energy going into a power plant makes it to the end user.

90% - When natural gas is used directly in the home, 90% of the energy produced at the well makes it to the end user.

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2.1 Tons of CO₂ – Switching from an electric hot water heater to a natural gas hot water heater reduces CO₂ emissions by 2.1 tons of CO₂ /unit/yr. (Emission estimates are based on DOE's electric power emission estimates for all generation energy sources from Electric Power Annual 2005 data.)

\$280 - In addition, using a natural gas hot water heater versus an electric hot water heater saves approximately \$280/yr. (based on \$0.1065/kWh and Zia's current rate of \$8.23/Mcf).

It just makes sense to directly use natural gas in the home for cooking and heating instead of burning it in the power plant.

Directly using natural gas in the home or business benefits both the consumer and the environment:

- Overall conservation of natural gas as a nation – Directly using natural gas “maximize[s] the productivity of this incredibly valuable American energy asset”. (American Gas Foundation Press Release; American Gas Foundation Releases Study on the Direct Use of Natural Gas; May 1, 2008)
- Using natural gas appliances instead of electric appliances lowers electric demand which reduces the need to build additional power plants.
- Reducing the need for new natural gas power plants also reduces the strain on the natural gas markets which will relieve the price volatility for natural gas. In other words, some of the recent increases in

natural gas prices have been attributed to new demand for natural gas from natural gas fired power plants.

- Directly using natural gas actually reduces CO₂ emissions because the consumer burns less natural gas to achieve the same results.
- The consumer saves money overall on his or her total energy bills.

For more information about “direct use”, visit the American Gas Foundation website at www.gasfoundation.org.

For incentives to convert your electric appliances over to natural gas, check out Zia’s \$Gas Bucks\$ program.