

Energy: We can't live without it

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We need energy for our bodies, our homes, our cars, and our work. Our bodies run on food, our children's toys run on batteries, our cars run on fuel, and our home runs on electricity and gas. Food, batteries, fuel, gas and electricity all have their own long potentially destructive process before we are able to use them. We are just beginning to realize how to change that process. There are real ways to using alternative methods for powering our everyday needs; renewable energy is one such alternative.

Currently, most of our energy is not renewable, meaning it is being mined or drilled from a finite source. Our power supply is mainly generated from coal and our fuel supply is being made from petroleum.

Some renewable alternatives to traditional power sources such as coal, nuclear and gas would be solar, wind, hydro, and biomass. New achievements are being made into the cost and productivity of solar panels and wind turbines, making them some of the most popular choices for renewable energy. Biomass is a new energy source utilizing woody waste converted to gas at through combustion, pyrolysis, or digestion.

Transportation is a critical part of our American culture. Up until recently, fuel was an affordable expenditure, but with the prices of oil rising from unfriendly nations, we are all looking for new ideas on transportation. There is an increase in sales in more fuel efficient vehicles and also biofuels. Biofuels are made from agricultural sources unlike petroleum based fuels, which is why they are considered renewable energy. The two known biofuels are ethanol and biodiesel. Ethanol can be made from corn, potatoes, sugar cane, and even corn stalks. Alabama is agriculturally blessed with climate for sweet potato and sorghum, which are even more efficient than traditional ethanol feedstocks. All vehicles can run on 10% ethanol (E10) but flex-fuel vehicles can run on up to 85% ethanol (E85). Biodiesel is made by chemically processing various oils or fats. Soybean, peanuts, canola, used fryer grease, animal fats, and even algae are just some possible feedstocks for biodiesel. All diesel engines can run on biodiesel with few problems.

Much work is being done regionally on transitioning from our traditional energies to training and implementing these renewable energy concepts. Universities, junior colleges, and high schools are inspiring our young people to become renewable energy conscious as well as giving hands on opportunities. These classrooms are preparing the students for the new "green collar" jobs that will be heavily focused on energy conservation and harnessing concepts. Under the leadership of our new president, many federal funding opportunities are now available in order to accelerate the new sustainable energy sector.

Locally, organizations such as the Renewable Energy Outreach (REO) program, the emerging Energy Alternatives Research Center, and the Huntsville Mayor's Green 13 Council have been created to spearhead efforts on economic growth and energy specific research. REO (www.reo-program.org) especially encourages innovative entrepreneurs who are looking to enter the renewable energy arena and brings more awareness on renewable energy to the community in and around Alabama. The Huntsville community is organizing an Energy Center made up of businesses, non-profits, educational entities and local government to be a one-stop clearinghouse for energy technologies and research. The city of Huntsville (www.hsvcity.com/green) is keen on going green and with the Mayor's Green 13 Council, is setting serious goals to see significant energy improvements for our area.

Renewable energy is an exciting new frontier that helps us address the need for clean energy while reducing our dependence on foreign oil. Become an important part of this endeavor by making a personal commitment to seek out ways to reduce your demand on traditional energy while embracing new energy resources. We can share our consciousness with our neighbors and children and encourage them to involve themselves in community and school programs related to energy alternatives.

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