RESOLUTION AMERICAN ASSOCIATION OF FAMILY AND CONSUMER SCIENCES

RENEWABLE ALTERNATIVE ENERGY BENEFITS FOR FAMILIES, CONSUMERS, AND COMMUNITIES

Whereas there is an increasing need for using renewable energy sources and implementing conservation practices to reduce reliance upon non-renewable products such as oil, and

Whereas consumers are seeking housing which promotes conservation and the use of alternative forms of energy, and

Whereas our nation's 81 million buildings consume more energy than any other sector of the U.S. economy, and

Whereas a variety of renewable alternative energy sources such as wind, solar, geothermal, bio-mass, ethanol, and hydrogen are currently available and/or in research and development, and

Whereas renewable alternative energy sources will not be depleted and are environmentally friendly if careful attention is paid to location and/or use decisions, and

Whereas renewable alternative energy sources can meet today's needs of families, consumers, and communities without compromising the ability of future generations to meet their own needs, and

Whereas the Colorado Association of Family and Consumer Sciences goes on record (January 30, 2006) in support of alternative renewable energy sources and encourages increased government tax incentives and state and national funding, and

Therefore, be it resolved that the American Association of Family and Consumer Sciences endorses education for families, consumers, and community leaders on the use of renewable alternative energy as well as funding and economic incentives to support research and development.

Adapted from Resolution submitted from Colorado Association of Family and Consumer Sciences, 2006 Annual Conference Submitted to AAFCS Public Policy Committee, June 2006

Submitted for Affiliate Review - February 2007

RESOLUTION BACKGROUND INFORMATION Renewable Alternative Energy Benefits for Families, Consumers, and Communities

Consumers are concerned with protecting the environment and making wise decisions with regard to energy sources. Consumers face three problems of huge proportion regarding energy and the environment in the United States:

- 1. Energy use per capita is at a greater rate than ever before in history.
- 2. Energy is primarily imported from other countries, particularly petroleum for gasoline production which creates a security issue because this energy source could be cut off in a crisis situation.
- 3. Combustion of carbon-containing fossil fuels produces carbon dioxide, creating a "greenhouse gas" phenomenon in the earth's atmosphere called "global warming".

To aid families, consumers, and communities in making wise choices, may it be known that the Colorado Association of Family and Consumer Science unanimously voted at its 2006 Annual Conference to support wind power as a viable alternative that contributes to meeting increasing energy needs in the US. The Colorado affiliate also voted to submit this resolution to AAFCS for member consideration to address not only wind power but all sources of renewable and alternative energy. It is appropriate for Colorado to submit this proposal because it is the home of the National Renewable Energy Laboratory and the National Wind Technology Center.

America faces major considerations about:

- a. energy need vs. energy for enhanced quality of life vs. energy for pleasure;
- b. environmental impacts of energy resource depletion;
- c. energy conservation and efficiency.

It is possible to reduce dependence on foreign oil by adopting greater use of alternative energy sources. Increasingly, states are establishing an "Energy Portfolio" that specifies a plan of action to incorporate renewable energy supplies for public consumption within the next two decades. Some states have already adopted a 20/25 plan to achieve 20% of their electricity supply from renewable sources by 2025. Other states need encouragement to enact such plans of action.

Because wind is a product of the sun shining on the earth and the earth's atmosphere, it is a resource that will not be depleted by tapping it for the generation of electricity, unlike the expendable resources on which our country is currently so heavily dependent. Wind power is one of the most promising and cost-effective sustainable energy technologies available today. Currently, wind power costs 3-4 cents per kWh to generate, making it one of the cheapest resources available and has a 1.8 cents federal tax incentive.

Solar energy offers options for reducing dependency on non-renewables. During the energy crisis of the 70s, solar energy was used increasingly with tax incentives to encourage its use. When the crisis was over, incentives for further use of solar energy technology were eliminated. While countries around the world utilize alternative renewable energy sources such as solar, the United States continues to be dependent on fossil fuel for the majority of energy needs.

Geothermal energy utilizes ground temperatures to provide heating, cooling and water heating for homes and businesses. While used extensively in Europe, it has achieved minimal use in the United States primarily due to lack of knowledge and higher initial cost for installation. Investment in geothermal energy returns to the consumer in 5 to 7 years depending on electricity and gas rates. It has no impact on the environment because there is no exhaust from burning fossil fuels. Biomass fuels such as diesel and ethanol are produced from crops (corn, wheat, and sorghum) that are grown each year resulting in a continuous source of base product. Besides ethanol for vehicle fuel, the fermentation process for ethanol does not create hazardous environmental waste, but rather creates high quality livestock feed.

The positive environmental impact of wind, solar and geothermal is there is no need to tear up vegetation or displace people to develop projects. With the exception of some types of solar installation, water is not used to produce this type of energy which is an important consideration because water is a continuing limited resource, especially in the arid west.

Environmental concerns exist with alternative renewable energy sources. Wind power can produce visual, avian, wildlife, and sound (aerodynamic and mechanical) impacts. Solar energy also has visual impacts from equipment installation. Current research is addressing and minimizing these concerns and they are generally considered small compared with the greater negative impacts of conventional coal, nuclear, natural gas and hydroelectric power sources.

In addition to using renewable energy, society needs to reduce total energy consumption through energy conservation and improved energy efficiency. Improving energy efficiency is the goal of the ENERGY STAR program, a joint program of the US Department of Energy and the US Environmental Protection Agency helping save money and protecting the environment through energy efficient products and practices. US consumers, with the help of ENERGY STAR, saved enough energy in 2005 to avoid greenhouse gas emissions equivalent to those from 23 million cars, while saving \$12 billion on utility bills. Energy efficient choices can save households about a third on their energy bill with similar savings of greenhouse gas emissions, without sacrificing features, style or comfort.

Home design and maintenance can promote and model more sustainable lifestyles. Green Buildings are structures that are cost-effectively designed, built, and operated in a manner that achieves the greatest possible energy efficiency, indoor air quality, occupant health, resource efficiency, and environmental compatibility. Green buildings are important elements of sustainable communities because they promote the use of locally produced, renewable products, environmentally sound development and construction practices, and energy and resource efficient systems. These practices help create communities that improve the quality of life and economic vitality for current and future generations. The LEED green building rating system, developed and administered by the U.S. Green Building Council, promotes design and construction practices that increase profitability while reducing the negative environmental impacts of buildings and improving occupant health and well-being.

Alternative renewable energy is an appropriate technology for American Association of Family and Consumer Sciences to endorse because development of these energy sources meets present needs of families and consumers without compromising the ability of future generations to meet their own needs. (World Commission on Environment and Development, 1987; JFCS, Vol. 98, No2, 2006). AAFCS's support will contribute to expanded research efforts and encourage targeted national and state government funding needed to strengthen alternative energy resources and their use to improve quality of life.