
Improving the Greater Houston Economy through Renewable Energy

Renewable Energy Working Group Members

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Introduction

The energy sector is headline news and has been at the top of the agenda for governments and a growing concern for everyone. The big questions are about energy security and global warming. Will we have enough energy for the future? And how can we use energy without impacting our climate?

Renewable energy utilizes our natural resources such as sunlight, wind, hydropower, natural gas, tides and geothermal heat and other resources such as our waste products. Renewable energy technologies range from solar, wind, low-carbon coal technology and hydroelectricity to biomass and biodiesel in order to generate energy for heat, light and mobility.

Our goal is to work together in new ways to develop new partnerships between business and policy makers to capture the benefits of energy security, economic growth, and environmental sustainability by promoting and rewarding low-carbon solutions. This committee will address some of the needs for promoting renewable energy, such as the need of renewable energy incentives and how to promote commercialization of affordable renewable and alternative energy. The following are the committee recommendations:

Promote Innovation in Renewable Energy

Renewable energy is sometimes criticized for being unreliable, unsightly, and expensive and the amount of its use is small in comparison to the total energy demand. To increase the demand for renewable energy, we need to accelerate the development and deployment of technologies that can help reduce carbon emissions and ensure that appropriate incentives are introduced to enable these new technologies to scale up. For example:

- A federal renewable portfolio standard which would provide greater energy security, more sustainability and extra employment.
- Expansion of the current Production Tax Credit structure over a long time-frame and production incentives that encourage scaling up in wind power.

- The development of a national transmission grid to further unlock the potential for renewable energy projects across the US.
- Incentives that recognize the particular contribution of solar in off-setting the most expensive peak power rates – such as real time pricing.
- Incentives for biofuels that encourage advanced fuels by targeting performance in greenhouse gas reduction and energy content.
- Appropriate incentives for carbon capture and storage projects – such as including it in cap and trade systems and a drive to build commercial scale demonstration plants.

Promote Research Partnering between the Private Sector, Universities and Governmental Research Agencies

Improve tax credits, grants and other measures for members who partner in the development of new energy sources. Develop a renewable energy technology information clearing house (database) for sharing research information. By investing in each others research we can become closer to making clean, affordable alternative sources of energy a reality.

Increase Public Awareness on Renewable Energy

Develop a governmental Public Renewable Energy Awareness Program to educate the public on alternative energy sources and energy efficiency techniques and devices. Award grants to public schools that have classroom courses on uses of renewable energy and energy saving techniques. Create a central warehouse for renewable energy education materials to be distributed to educators. Materials should be in the form of lesson plans and classroom projects. Create workshops for teachers (workshop includes materials and items on renewable energy to be incorporated into classroom curriculum). Start a renewable energy educational website for teachers.

Conclusion

Biofuels, while beneficial, can only go so far because of their potential impact on the food industry as well as pressure they put on water and land.

Biodiesel is not an all or nothing product. Research has not been completed to determine what will happen to our planet if we change to an agricultural lifestyle. What changes to the environment will occur if we begin to farm all of our land? We still have not improved our farming practice to alleviate over-fertilization, pesticide use and land use conversion to farm land that would be needed to produce the amount of vegetable oil required to satisfy our needs. The farming industry must be made aware that research has to be conducted to alleviate the flaws in current farming practices before we allow them to pollute our environment. If research proves that we will have no side effects, we can then proceed forward.

Biofuels are not the answer to all our energy problems but it is one portion of renewable energy and in combination with others will allow us to conserve natural resources, reduce pollution, and minimize dependence on foreign sources to improve our lives.