

## Topic of Interest:

### **Alliance Commission on National Energy Efficiency Policy** ***Energy 2030: Recommendations to Double U.S. Energy Productivity by 2030***

We have long heard that energy-efficiency is the low-hanging fruit in reducing greenhouse gas (GHG) emissions. Now a high-level panel from business, academia, government, and the non-profit sector has developed a **roadmap for cost-effectively doubling US energy-productivity by 2030--using currently available technologies and design practices**. The research underlying this report found that achieving this goal will make the **economy more competitive while benefiting the environment**. The report, *Energy 2030: Recommendations to Double U.S. Energy Productivity by 2030* by the Alliance Commission on National Energy Efficiency Policy, includes recommendations for governments of all levels and for businesses as well as the projected impacts of the recommendations, when fully implemented. The proposals are intended have bi-partisan appeal. A summary of the summary is provided below.

Full report, 40 pages: [http://www.ase.org/sites/default/files/full\\_commission\\_report.pdf](http://www.ase.org/sites/default/files/full_commission_report.pdf)

Summary, 16 pages: [http://www.ase.org/sites/default/files/report\\_summary.pdf](http://www.ase.org/sites/default/files/report_summary.pdf)

Research for the report indicates that doubling American energy-productivity by 2030 by making buildings, vehicles, industrial equipment and transportation systems more efficient would result in remarkable financial savings for business, consumers and government. And these savings would far surpass the costs of the needed investments.

“By 2030 the average household would save \$1,039 per year in energy costs, net of the investment required to deliver those energy savings. That is roughly the same as what the average American household spends on education and nearly as much as average household spending on medicine and produce combined. American business would save \$169 billion a year, almost as much as the corporate sector paid in federal income tax in 2011... And efficiency improvements in government buildings and vehicles would save taxpayers \$13 billion a year, nearly as much as the annual budgets of the Department of Commerce and Environmental Protection combined.” (Summary, p. 12)

The study concludes that implementing the energy efficiency recommendations would benefit the economy in various ways. The monetary savings would enable the economy to expand while energy use declines, decoupling economic growth and energy use and making the economy more competitive. Further, doubling US energy productivity would redirect investment from energy supply to the more labor-intensive manufacturing and service sectors, increasing overall US employment. And with increasing efficiency, America would need to import less fuel, thereby limiting the economy’s vulnerability to energy price spikes.

Doubling energy productivity would also benefit the environment by reducing air pollution and greenhouse gas emissions. Achieving the energy productivity target would cut business-as-usual sulfur dioxide and nitrogen oxides roughly in half, with resulting benefits to human health. And it would cost-effectively address climate change, reducing GHG emissions 22% below 2005 levels by 2020 and 33% by 2030.

The report features recommendations for all levels of government. The recommendations for local government provide a roadmap to guide Sunnyvale in developing policies and practices to double our city's energy productivity and help fulfill residents' expectation that government provide the foundations for a sound economy and a healthy environment. Local government recommendations:

**Establish programs for financing efficiency measures**, which may use repayment on utility bills or property tax bills (the capital could be provided by institutional investors).

- On-bill repayment programs administered by utilities but with capital provided by third parties, including banks and other investors
- On-bill finance programs with capital provided by utilities from ratepayer or shareholder funds
- Property assessed clean energy (PACE) financing with repayment on property tax bills. The capital is usually obtained by local or state governments issuing bonds for residential buildings and by third parties working directly with the building owner for commercial buildings.

**Offer, and encourage the private sector to offer, the use of buildings and other facilities as test beds** to demonstrate and validate emerging energy productivity technologies and practices.

**Lead by example. Apply innovative best practices to government buildings and vehicle fleets.**

- Set targets for efficiency improvement.
- Implement energy management systems.
- Benchmark, rate, and disclose building energy use and efficiency.
- Conduct ongoing or periodic re-commissioning to ensure buildings are performing as they were designed.
- Consider location efficiency when siting facilities.
- Procure innovative, high-efficiency equipment and vehicles.
- Encourage energy management in supply chains.

**Quickly adopt updates adopted by the International Code Council and the American Society of Heating, Refrigerating and Air-Conditioning Engineers and fund enforcement of their full compliance.**

**Promote efficient development patterns and transportation infrastructure.**

**Require disclosure of energy information in commercial buildings and at time of sale or rental in residential buildings.**

**Collaborate to promote, improve and develop technical training curricula and credentials to include energy efficiency technologies and practices. (NOVA?)**

If Sunnyvale adopts a Community Choice Aggregation (CCA) program, the recommendations for energy utilities on page nine of the summary would also apply.

The 2030 goal of doubling energy productivity by 2030 is termed “ambitious, but achievable.” The goal aligns with City policies supporting economic and environmental sustainability.

The Sustainability Commission is pleased that such a diverse and well-informed group has agreed on both an achievable target and concrete and specific recommendations. We look forward to Sunnyvale’s timely implementation of the relevant recommendations in this report so that Sunnyvale can do its part to achieve or surpass the energy productivity goal. Since energy efficiency is the low hanging fruit and since these recommendations were selected based on their impact, political viability and feasibility of implementation; this Commission advocates looking to this report for inspiration, policy direction, and guidance in implementing the Climate Action Plan. We hope Councilmembers can find the time to read the 16 page summary.