

RENEWABLE ENERGY



Sources of renewable energy include sunlight, wind, rain, tides, and geothermal heat. In contrast to fossil fuel-generated energy, renewable sources do not emit carbon dioxide or diminish any finite supply in the process of generating useful energy.

Energy efficiency and renewable energy are the two pillars of sustainable energy policy. Both resources must be developed aggressively if we are to stabilize and reduce carbon emissions in our lifetimes. Efficiency is essential to slowing the growth of energy demand to a low enough rate that clean energy supply growth can make deep cuts in fossil fuel use.

If energy demand grows too fast, renewable energy development will chase a receding target. Likewise, unless clean energy supplies come online in large measures, slowing demand growth will not reduce total emissions to needed levels. Any thoughtful vision of a sustainable energy economy thus requires major commitments to both efficiency and renewables.

The combined potential of energy efficiency and renewable energy to reshape America's energy economy is very substantial. In 2000, national laboratories published *Scenarios for a Clean Energy Future* (Interlaboratory Working Group 2000), a comprehensive assessment of energy efficiency and renewable energy's contributions to the nation's energy economy over a 20-year timeframe. It showed that energy efficiency could reduce electricity use by 24% compared to the reference case. And by aggressively adding renewables to the power grid, carbon emissions from electric generation could be cut by a total of 46%.

Source: <http://aceee.org/topics/renewable-energy>