

National Sierra Club Statement on Energy Resources Policy

Part 1

We get questions about what Sierra Club policy is on renewable energy and how it might apply to projects planned for San Luis Obispo County. Sierra Club understands the urgent need to transition away from fossil fuel technology to renewable energy and supports projects that are developed in an environmentally responsible manner with sustained and significant local community benefits and oversight. The specifics of the renewable energy projects planned for SLO County are still being developed, so the Sierra Club has not taken a position on those projects. In this newsletter, we present Sierra Club's Energy Resources Policy as a starting point for understanding how Sierra Club will analyze and comment on renewable energy projects.

Below are excerpted paragraphs from the 22-page *Energy Resources Policy*, which can be reviewed in full at: https://www.sierraclub.org/sites/default/files/Energy-Resources-policy_0.pdf

Context

Our society now faces a fundamental challenge greater than any in history. Dependence on fossil fuels is causing global warming, the depletion of energy resources, and severe damage to human health and the environment. The impacts of burning fossil fuels threaten the security of our nation, the survival of species, and impairs the Earth's capacity to sustain life. (P. 2)

Guided by the conservation ethic, the Sierra Club has crafted this comprehensive Energy Resources Policy to promote a positive vision of a sustainable energy future. The Sierra Club's clean energy strategy will wean us from oil, coal and other fossil fuels, minimize energy waste, work in harmony with natural systems, and define the technologies and smart energy solutions that will meet our nation's energy needs. (P. 2)

The path to a sustainable energy future starts by promoting energy conservation, tapping the enormous resource of energy efficiency, directly reducing dependence on non-renewable fuels and maximizing the benefits of renewable energy. At the same time, energy efficiency and renewable energy will be the engine of new economic growth, saving money and creating jobs. The result will be lasting improvements for our economy and our environment, more livable communities, more productive manufacturing, less wasteful use of materials, and less pressure on the natural systems of the Earth that sustain us. (P. 2)

The Sierra Club's ranking of energy resources set forth in this policy provides initial guidance, but this roadmap is only a first step. The journey cannot be perfectly mapped out before we begin moving forward. The Sierra Club's strategy incorporates the best "no regrets" strategies

for the economy and the environment, whether fossil fuel depletion and global climate change advance rapidly or not as quickly as expected. (P. 2)

Global Climate Change and Energy Resource Depletion

Stabilization of the global climate is an urgent matter requiring an immediate and effective response. International scientific consensus, confirmed by the most respected national scientific bodies in the U.S. and worldwide, indicates that continuing “business as usual” for even a few more years will greatly increase the risk of harmful and irreversible climate change, affecting the productivity of natural systems, the survival of species, and the safety and well-being of all human societies on Earth. (P. 4)

Our society’s actions will determine the level of eventual success. Starting quickly and decisively is the most important element in our climate stabilization strategy, because greenhouse gases emitted now will persist in the atmosphere and have effects for centuries to come. (P. 4)

Carbon dioxide (CO₂) is the most important greenhouse gas because it acts as the Earth’s principal “climate control knob.” Our civilization started emerging thousands of years ago when CO₂ concentrations rose to a stable level associated with a moderate global climate. But emissions from more than two centuries of fossil fuel use and deforestation have increased the level well beyond the safe climate limit. (P. 4)

As a result, the most important climate goal is to limit and reduce the total stock of CO₂ in the atmosphere as quickly as possible. In addition to dramatically reducing CO₂ emissions, other greenhouse gases and black carbon must also be reduced, and “green carbon” must be built up by capturing more airborne CO₂ through natural forest protection, reforestation and other efforts. (P. 4)

Confirming this, new research from around the world shows that climate change is coming at us faster and harder than seemed possible even a decade ago. Many leading climate scientists now believe that the concentration of CO₂ in our atmosphere should be reduced below 350 ppm within the next century in order to avoid severe climate disruption and irreversible tipping points. (P. 4)

As the nation with the largest historical emissions of greenhouse gases, the U.S. has a moral obligation to respond vigorously. The Sierra Club places primary emphasis on making substantial cuts in CO₂ emissions as soon as possible by moving beyond coal and oil, shifting to a clean and sustainable energy economy, reducing other greenhouse gases, and protecting forests and other lands to build “green carbon” and provide resilient habitats. There is no time to lose. (P. 5)

Together with the wide availability of renewable energy resources that can replace fossil fuels, the availability of very large energy savings through conservation practices and efficiency

measures offers a substantial opportunity to decrease greenhouse emissions, improve the economy and protect the environment. (P. 5)

We can achieve a stable climate and sustainable energy system through continuous improvement in energy use, technology choice, and public policy, economic decision-making that fully incorporates environmental values and protects communities, and individual conservation commitments that every person can make. (P. 5)

The Sierra Club finds that:

A. Fossil fuel use is increasing carbon dioxide (CO₂) and other greenhouse gas emissions to levels that are changing our climate substantially, threatening human health and harming natural systems.

B. The current use of fossil fuels causes serious damage to public health. Nitrogen and sulfur compounds, soot, smog precursors, radionuclides, and toxic substances such as mercury from the combustion of coal affect the health of all people and contribute to tens of thousands of premature deaths in the U.S. each year. All too frequently this damage is concentrated locally, putting the health and livability of entire communities at risk.

C. Significant environmental damage is starting to occur from greenhouse gas emissions already in the atmosphere, and further emissions will accelerate the harm. Without immediate action to reduce these emissions, degradation of the world's climate and natural systems, including the risk of widespread habitat destruction and species extinction, will dramatically increase within our lifetimes.

D. If we are to minimize the risk of dangerous climate change, global average temperature increases must be stabilized at 1.5 degrees Celsius (2.7 degrees Fahrenheit), relative to preindustrial levels. Many leading climate scientists now believe that CO₂ should be reduced below 350 ppm within the next century in order to avoid severe climate disruption and irreversible tipping points. The Sierra Club supports this emissions reduction target as an ultimate goal.

E. With less than 5% of the world's population, the United States produces 20% of the world's greenhouse gas emissions. Our nation has an obligation to lead the world in cutting fossil fuel use. Emissions of CO₂ per year in the United States must be reduced to at least 90% below the present (2011) by 2050. Other greenhouse gas emissions must likewise be reduced, and "green carbon" strategies to protect and enhance forests and other land-based carbon sequestration must be accelerated. (P. 6)

The Sierra Club envisions that within this century the world energy system will use almost no fossil fuels, and will instead rely on the efficient use of abundant renewable energy from the sun, the wind, water, biomass, and the Earth's own heat. To achieve this, the nations of the world must immediately and decisively shift to building a clean energy future. (P. 7)

By 2050 the US must eliminate virtually all use of fossil fuels. Our fossil fuel emissions must be reduced as rapidly as possible. Different economic sectors can advance at different paces, with society having the most options to replace coal as an electricity source, and less flexibility for industrial processes that emit carbon directly, such as steel and cement. (P. 7)

The Club will also advocate for the following 2030 clean energy outcomes:

- 1. 100% carbon free in the power sector*
- 2. 50% reduction in oil use in the transportation sector below 2005 levels. (P. 7)*

The way forward will involve a transition period during which new and improved technologies are developed, old systems are replaced, and society moves toward a more sustainable structure. While there will be breakthroughs in technologies, policies and public attitudes, change must also come through incremental progress, because it takes time to replace existing infrastructure and practices. (P. 8)

During this transition the Sierra Club will focus on three goals:

(1) SUPPORT THE CLEAN. Accelerate the development and market growth of sustainable, low carbon energy resources, including improving the efficiency and performance of buildings, vehicles, and industrial processes, and implementing distributed generation, community-scale, and utility-scale renewable sources.

(2) ELIMINATE THE DIRTY. Phase out environmentally damaging energy fossil fuel and nuclear technologies. Priority will be given to first eliminating the dirtiest, most damaging technologies such as coal and tar sands.

(3) REGULATE ALL. Ensure proper siting and effective regulation of all energy facilities. During the transition, however, the pathway to carbon-free energy production by 2050 must be carefully prepared and encouraged. Unnecessary new barriers should not be created to the rapid deployment of energy efficiency and renewable energy.

Innovation in technology and methods of energy use is a key to achieving a sustainable energy future. Human ingenuity, imagination and strategic investment in research and development of new technologies will usher in a new energy era. However, experience shows that support for innovation must be tempered with thorough review of new practices and technologies to fully understand their life-cycle impacts and be able to respond to unanticipated consequences. (P. 8)

Energy conservation is a top priority for the Sierra Club. Energy conservation – practices that reduce and eliminate unnecessary use of energy and materials – guides the Sierra Club in all our actions and energy source-related decisions. The Sierra Club is committed to an array of conservation and efficiency strategies that will reduce energy consumption. (P. 9)

Americans collectively use more energy than any other nation, so we have the greatest opportunity and responsibility to conserve. Telecommuting, recycling, living closer to work, shopping, and recreation, and making more efficient use of vehicles, buildings and equipment are all examples of possible conservation actions by individuals. Improved community design, land use and transportation modes are examples of policy areas where conservation can be achieved. (P. 9)

The Sierra Club itself can provide a model for the energy use of our society as a whole. Sierra Club members are called upon to take action in their homes, workplaces and communities, and to minimize the energy impacts of their travel and transportation choices. (P. 9)

As the United States builds a clean energy economy and makes a rapid transition away from fossil fuels and nuclear power, the Sierra Club will both promote the transition and work to protect the natural environment and communities from avoidable negative impacts associated with even clean energy sources. As an equal priority to the deployment of clean energy, we must protect and restore wild places and build resilient habitats that can help species and ecosystems survive climate change. (P. 10)

Areas unsuitable for development by either commercial renewable energy projects or other energy projects should be identified, defended and protected. (P. 10)

Judging the protection appropriate for a particular site or area involves a complicated analysis involving numerous factors. In particular the degree to which the site has already been disturbed by agricultural practices and other forms of human development may be taken into account. The Club may require mitigation of the expected, negative impacts of the renewable energy installation as a condition of support. (P. 10)

The Sierra Club opposes energy development on public and private lands and in waters that are currently protected by legislative or administrative designations or that the Sierra Club has proposed for special designation based on specific environmental or wilderness criteria. Exceptions are allowed only where the proposed development can be shown to have insignificant effect on the resources for which the special designation was, or would be, established. This overarching consideration applies to all energy resources covered in this policy. (P. 10)