

# Center for American Progress



**JOHN D. PODESTA**  
**REMARKS TO THE UCLA ANDERSON FORECAST CONFERENCE,**  
**“CALIFORNIA & THE FUTURE OF ENERGY”**  
**LOS ANGELES, CALIFORNIA**  
**SEPTEMBER 28, 2006**

*\*Text as prepared for delivery\**

Thank you, Dean Olian, for that introduction, and thank you to the Anderson Forecast for allowing me to be here this morning.

You know, last week I was at another conference: the Clinton Global Initiative in New York.

The conference generated considerable buzz—and I’m not referring to Chris Wallace’s interview with President Clinton.

But rather, I’m referring to the \$7.3 billion in commitments taken in by this year’s participants, to solve pressing global problems, \$3 billion of that amount was pledged by one man: Sir Richard Branson—the British entrepreneur who, even more than Madonna, made the Virgin brand famous.

Over 10 years, Branson will invest in new and existing companies that make cleaner energy to replace fossil fuels.

Some \$70 million of that has already been invested in Cilion, a new company based here in California that plans to build ethanol plants.

Branson’s commitment to developing greener, alternative energies is significant on two levels.

First, it’s a whopping amount—a huge commitment of money aimed at avoiding dangerous climate change.

Second, his commitment demonstrates that being a good global citizen can be very good for business. He recognizes the potential market opportunities as well as the environmental necessity of alternative fuels and green technologies.

In fact, after he announced his pledge, Ted Turner noted in *The New York Times* that Branson will “probably make more money off of this than he will off his airlines themselves.”

My point here is simple: the renewable energy market is ripe for investment, and increasingly foreign governments are shaping it, and foreign companies and entrepreneurs, like Branson, are wasting no time tapping into it.

The United States is missing out on an important opportunity by not doing the same.

Consider that as recently as 1996, U.S. producers held 44 percent of the global solar cell market. By 2005 that figure had fallen to below 9 percent. Europe now has four times the wind power capacity of the United States, Brazil has become the undisputed world leader in the biofuels market, and European companies now control the top spots for turbine manufacturing.

The prominent positions these countries now hold in these sectors were largely made possible by government policies that created steadily growing markets for renewable energy. And the market response has been enormous: in 2005 alone, \$38 billion in capital flowed into all renewable energy, and that number could approach \$70 billion by 2010.

Despite this, America lags behind. Today, renewables make up just 6 percent of total U.S. energy, while foreign oil imports now account for over one third of our ballooning trade deficit.

We are falling behind...and as a result, we are seriously threatening our economic, environmental and national security.

This morning, I want to talk to you about those threats; but, at the same time, I also want to talk about the opportunities to turn them back in practical and profitable ways, which this state—California—has already begun to do.

But let me begin by honing in on the threats, first and foremost, those stemming from our dependency on foreign oil.

Today, the United States is responsible for a quarter of the world’s oil demand, yet we hold less than 3 percent of proven reserves. To make up for the shortfall, over 60 percent of our oil comes from foreign sources—up from 53 percent in 2000. And that’s headed up to 68 percent within 10 years under current policy.

These numbers are particularly alarming when you consider that our total oil consumption is nearly 21 million barrels per day, and absent any change, our demand will climb to 29 million barrels a day by 2025.

Globally, demand is expected to increase by 54 percent during that same period, largely due to the growing demand of industrializing economies, particularly China and India. In fact, China's demand for oil alone is expected to increase by five to seven percent a year. If that happens, China will surpass the United States as the world's largest consumer of oil by 2025.

To meet this increase in global demand, it is estimated that the world's oil-producing countries will have to strain to pump out an additional 44 million barrels of oil each and every day by 2025.

American consumers and American businesses have recently experienced the sting of oil demand outpacing supply. Crude oil costs added an estimated \$175 billion to the nation's trade deficit in 2005 and more in 2006. Volatility in the oil market creates further costs to our nation's economy, estimated by Oakridge Laboratories at a \$7 trillion loss in GDP during the past 30 years.

In sum, foreign oil is the lifeblood of our economy, and at the same time, one of the greatest threats to its continued vitality.

As our reliance on foreign oil continues to diminish our national treasury and household budgets, I also want to point out that it is diminishing our ability to exercise leadership on the global stage and to keep Americans safe at home.

Recently, the Center for American Progress in conjunction with Foreign Policy magazine, conducted a bi-partisan survey of 116 leading national experts. When they were asked what the U.S. government should give higher priority to, 82 percent agreed that reducing dependence on foreign oil should top the list. Today, oil is the weapon of choice for the governments that can wield it.

Consider that of the oil we import, 35 percent comes from the Persian Gulf region, leaving a substantial part of our energy supply in the hands of unstable and frequently hostile regimes. Iran has repeatedly threatened to cut off oil exports to selected nations if economic sanctions are imposed on it.

The wealth that has been created is used to fund radical madrassas through which extremist ideology is spread and, in some cases, finds its way directly into the hands of terrorists. As former CIA Director, Jim Woolsey has noted, we may be the only country in history to fund both sides of the war we are engaged in.

Outside the Middle East, oil rich countries use the threat of embargo to counter international pressures to implement democratic reforms and respect human rights, as we have seen in Sudan's resistance to pressure to end the genocide in Darfur.

Or look at Nigeria—the world’s 8<sup>th</sup> largest exporter of crude, our country’s 5<sup>th</sup> largest supplier, and Africa’s richest oil producing country. In the last 40 years, Nigeria took in more than \$350 billion in oil revenues, but today 70 percent of its citizens still live on less than 2 dollars a day. The oil rich Niger Delta region produces nearly all of the country’s oil, but its people live in grinding, destabilizing poverty. And the continuous armed conflict can fuel instability and become a breeding ground for terrorists.

So, who we get our oil from, how we get it and what we pay for it have significant consequences as I have briefly outlined. But *what we do with that oil* once we get it poses probably the most severe threat to the well-being of people in our country and people around the world.

The United States is responsible for 45 percent of global automobile carbon dioxide emissions. Combine that with the coal and natural gas we use to produce electricity and you get this result: 5 percent of the world’s population is responsible for a quarter of the world’s emissions that cause global warming.

This has earned us the dubious distinction of being the world’s biggest polluter.

And let’s be clear: climate change is real and already occurring.

Consider that:

- The rate of warming has been nearly 3 times the century long average since 1970;
- The 2005 Atlantic hurricane season broke all records for the number and intensity of tropical storms and hurricanes;
- In the past few years, extreme heat waves have caused more than 20,000 deaths in Europe, South Asia and fueled record breaking wildfires not far from where we are this morning;
- And finally, here in California, the Department of Water Resources’ latest report estimates that climate change could result in the loss of the Sierra snow pack and the seasonal water storage it provides. This is in addition to more droughts, more floods and more pressure on the Sacramento-San Joaquin Delta levees to hold against the rising sea levels.

But beyond the effects here at home, it’s important to note that the poorest people on earth—those least responsible for climate change—are most likely to suffer from its effects.

Today, they struggle to feed their families, to eek out a meager income, and to ward off deadly diseases.

Climate change is only making their struggle to survive that much more difficult.

In developing countries, especially Africa, water shortages are becoming worse, malaria outbreaks more widespread, and climate change induced famine stands to displace more than 250 million people worldwide by 2050. Over time, this could spark mass migrations, which will in turn, inflame geopolitical instabilities, as well as defeat efforts to reduce poverty and combat the spread of disease around the world.

If you want a glimpse of the future, look today at what is happening in the Horn of Africa, where a toxic brew of overpopulation, environmental degradation, religious conflict and poverty threaten to create another theatre of war in the fight against radical jihadism.

So that's the gist of the problem.

Now, the question remains, what are we going to do about it? What can we do today to take control of our energy future?

We as a nation have the ingenuity, know-how and determination necessary to create an energy secure America. We can find exciting new ways to build America's use of domestic, non-polluting renewable energy.

By capturing the energy of the wind, the light of the sun, the power of our rivers, and the heat stored in the crust of the earth, we can find new untapped resources that create jobs, improve our security, and build the health of our people, our planet, and our economy.

California led the way in the information technology revolution, and it is poised to lead the way in the technology revolution to produce clean energy and energy efficiency.

Let me mention 3 innovative examples of how California has, can and will turn back the threats of our global energy crisis, and what the federal government needs to do to both support and build upon this state's efforts.

First, what it has already done, specifically, California's commitment to stop climate change.

- California was the first state to pass legislation to regulate carbon dioxide emissions from cars four years ago (thank you Assembly-woman Fran Pavley);
- It has set landmark renewable energy and efficiency requirements;
- Los Angeles and San Francisco recently became founding members of the large cities climate leadership group, a group of global cities banding together to collectively reduce greenhouse gas emissions through innovative bulk purchasing agreements.
- And just this week, California enacted the landmark, bi-partisan, Global Warming Solutions Act, aimed at cutting greenhouse gases in the state to 1990 levels, or by about 25 percent, by 2020, and by 80 percent by 2050. It's the toughest US law ever enacted in response to climate change.

No other state in the country comes close to California's record on climate change.

As proof of California's leadership on this issue, when British Prime Minister Tony Blair recently visited the United States to talk about climate change—he didn't go to Washington to meet with the President. He came to California, he visited UCLA, and he signed an international cooperation agreement with your Governor.

As a country, it's time the federal government catch-up to California and the rest of the world. It's time to stop denying the science and start acting.

We need to develop and implement a comprehensive strategy to reduce greenhouse gas emissions both at home and abroad.

At home, the first step is to institute a cap and trade system to reduce CO<sub>2</sub> emissions. A cap and trade system would provide regulatory certainty, reward innovation to improve efficiency, and provide strong market incentives to invest in renewable fuels.

Abroad, the United States—rather than being a roadblock to change—must immediately re-engage and lead the effort to reach and enact a global climate agreement. A key part of re-engagement includes working with industrializing economies—like China and India—to meet their growing economies' energy needs in sustainable ways.

To help move them towards more environmentally yet economically sustainable energy infrastructures, the U.S. should first provide guidance, in conjunction with the World Bank and others, to ensure that these developing economies avoid the trap of oil dependence and make better use of cleaner, renewable energy sooner.

China, with its enormous coal reserves and enormous need for energy, provides a particularly daunting problem. We must immediately pursue technology transfers, loan guarantees and other incentives for the construction of new coal-fired plants with carbon capture and storage capabilities.

Second, let me mention what California can do: they can pass Proposition 87, the California Clean Energy Initiative.

Proposition 87 will put \$4 billion dollars into reducing California's dependence on gasoline and diesel by 25 percent over the next 10 years.

Of that \$4 billion, none will come from consumers' pocketbooks; instead, the effort will be funded by oil drilling fees paid by oil companies, like they do in every other oil producing state in America. \$4 billion is a drop in the hat considering Exxon's profits were \$8.4 billion in just the first quarter of 2006.

To meet its target, Prop 87 will put that money towards expanding use of existing technologies, funding the development of new and improved ones, and bringing alternative fuel, its necessary infrastructure, and energy technologies to the market faster.

Passing Prop 87 can help pave the way for similar federal policies needed to reduce our country's dependency on foreign oil, which benefits everyone.

Let me just mention one specific federal policy.

Similar to Prop 87's shift to alternatives, on the national level, we need to mandate that 25 percent of the liquid fuels our country consumes be produced by renewable sources, mainly from agriculturally produced bioenergy, by 2025.

To achieve this, we don't need a radical technology shift, we don't need a brand new energy infrastructure, the costs of transitioning in the short term are minimal and the long-term financial gains are substantial.

It's as simple as a \$50 to \$100 adjustment to turn gasoline vehicles into flex fuel vehicles that can burn high ethanol blend fuels (as they do in Brazil)...to require large distributors to install E85 pumps and provide a stable investment climate for new biomass based fuel.

Today, most ethanol we currently produce is from corn. And while further production and distribution of corn-based ethanol will put us on the right path now, bigger investments from both government and industry—particularly in the research and development of cellulosic ethanol—are needed to ensure that we meet the 25 x 25 goal and become an important player in the global renewable energy market.

Finally, let me mention what I know California will do.

It will use its tech sector, university base and venture capital infrastructure to create the new energy industries of the future.

It has pioneered the solutions to many of our world's problems in the past, and when it comes to energy, California is poised to do so again.

As the recent American Energy report by The Center for American Progress and Worldwatch Institute pointed out, clean, renewable energy technologies are here, they are for real, they are cost effective, and they are set to take off.

Wind and solar are actually the world's fastest growing energy sources today.

According to Clean Edge research, even without federal intervention, biofuels (global manufacturing and wholesale pricing of ethanol and biodiesel) will grow from \$15.7 billion in 2005 to \$52.5 billion by 2015. Wind power is expected to grow from \$11.8 billion in 2005 to \$48.5 billion in 2015. Solar photovoltaics are projected to grow from an \$11.2 billion industry in 2005 to \$51.1 billion by 2015.

That makes clean energy and energy efficiency technologies one of the hottest investment fields for venture capitalists. Renewable energy investments have nearly doubled over the past three years, and have increased six-fold since 1995 with cumulative investment over the period of nearly \$180 billion.

Venture capitalists put more than \$150 billion into US based companies such as Advent Solar, Energy Innovations, Heliovolta, Miasole, Nanosolar, and Powerlight in 2005—double the investments of 2004. As a percent of total VC investments, energy quadrupled from under 1 percent of total investments in 1999 to 4.2 last year. The three largest technology IPOs of 2005 were actually solar companies: Q-Cells, SunPower, and Suntech Power.

We are seeing new investment by large corporations and small start-ups in developing cleaner more efficient automobile technologies. New investment in energy storage devices, no-carbon building designs, and micro power sources including solar roofs and small wind turbines. They are poised to revolutionize the electricity grid and create the energy equivalent of the Internet—a robust, reliable, efficient grid where innovation can occur and efficiency can be rewarded at the consumer and application end of the grid rather than solely at the center.

That's an energy future we must create—one that California's venture spirit is poised to create.

And if we make the right policy choices, one that will make future Anderson Forecasts filled with new investments, new industries, new jobs and one that will bring us to a safer and more secure world.

Thank you.