

**Congresswoman Gabrielle Giffords
Keynote Remarks for Solar Summit
Friday, January 9, 2009**

Hello, everyone. I'm Gabrielle Giffords, Congresswoman from Arizona's 8th Congressional District. It is my great pleasure to join with all the distinguished speakers, organizers, and sponsors to welcome you to the Arizona Leadership Summit on Solar Energy & Economics. I am very disappointed that my official duties in Washington have kept me from being with you in person.

This summit on solar energy is important. Your being here is important.

Today we are faced with an urgent need to transition to clean, domestic, and secure sources of energy. For the sake of our economy, our national security, and the environment, we **MUST** make this transition without delay.

President-elect Barack Obama very recently appointed John Holdren as National Science Advisor. Holdren's perspective is important to what we are doing today. He states:

“Without energy, there is no economy. Without climate, there is no environment. Without economy and environment, there is no material well-being, there is no civil society, there is no personal or national or international security.”

Today's conference is about the incredible opportunity Arizona has to lead the transition to a new energy economy, specifically through solar power. Solar power represents one of the best

economic development opportunities our state has ever had. There are many reasons I believe this to be true, but they can all be distilled to two basic insights:

- 1) Arizona has the highest solar power potential in the nation, and
- 2) Long-term trends point toward a dramatically increased role for renewable energy in the years and decades ahead.

Despite current hurdles, we must keep our focus on the big picture. Consider the following macro-trends.

- ***Trend #1: Rising energy demand.*** Global demand for energy is growing by leaps and bounds. A 2007 report by the International Energy Agency indicated that China would need to install 800 gigawatts of power plants the following year - about as much power supply as all of Europe currently has. In the coming years, huge emerging economies like China and India will continue to fuel rapid demand growth, straining supplies of traditional energy sources and pushing prices upward. The economic downturn has slowed things down for the moment, but the slowdown is certain to be temporary.

- ***Trend #2: Increasing consequences of fossil fuel dependence.*** The economic, security, and environmental consequences of our fossil fuel addiction cannot be sustained. They are sapping our strength, tying our hands, and undermining our future. In 2006, Arizonans sent more than \$10 billion out-of-state for transportation fuel. We also spent more than \$2.4

billion on fuel to generate our electricity – much of it from out-of-state as well. As global demand grows, and prices rise, these numbers will only increase.

- ***Trend #3: Increasing efficiency and falling prices for solar technologies.*** This is one trend that is headed in a positive direction. Not only do solar technologies represent a solution to the challenges mentioned above, the solution is more and more viable with each passing year. According to a 2008 study by the Prometheus Institute, prices for traditional silicon-based panels should fall from \$3.66 per watt in 2007 to \$2.14 per watt in 2010, and thin-film PV should fall from \$2.96 per watt to \$1.81. The price of coal-generated power is approximately \$2.10 per watt.

I have spoken with numerous solar researchers and solar company CEOs, and most agree that solar power technologies are on track to be cost competitive with coal-fired electricity by 2012, if not sooner. In some markets, solar is cost competitive today. When it becomes less expensive to generate electricity with solar energy than coal, the path will be open to a radical transformation of our energy system.

Given these trends, the question is not whether we will see increasing demand for solar power in the coming years – we definitely will. There is also no question whether this transition represents a significant economic opportunity – it is huge. The question that remains, however, is whether we in Arizona will embrace this transition – even drive it – or be content with a bit part, as others dominate this opportunity.

In an article last June, the *Economist* magazine noted that once solar electricity becomes cost competitive with coal fired electricity, “the sky is the limit” for solar power. And the market for energy is huge. According to John Doerr, a prominent venture capitalist in Silicon Valley who tracks the energy industry, the global energy business is worth \$6 trillion a year—about 10% of the world’s total economic output. And most projections indicate that by 2050, power consumption is likely to double from its current level.

Where will this power come from? With your leadership, Arizona can be the home for a dynamic solar industry. We have the necessary ingredients to be a global leader in the emerging solar industry beyond abundant open-space and sunshine.

Our state is also home to a vibrant business community and world-class research universities with strong programs in solar energy and optics. Arizona has the talent, skills, and resources to lead in all aspects of the solar industry, from research and development to product design, from manufacturing to installation, from the export of solar products to the export of clean solar power itself. Our state can position itself at the very epicenter of this global industry.

Now it is time for us to take our collective efforts to a new level. It is time for us to come together as a state, share our lessons learned, and collaborate to make Arizona the best place in the world for the solar industry to do business. This must be a collaborative, state-wide effort, or it will never achieve its full potential.

Of course we need action at the federal level. We are discussing many ideas in Washington for possible inclusion in the economic stimulus package or a separate energy bill. Here are a few:

1. *Improve the Solar Investment Tax Credits.* We won a great victory for solar last year when we passed an 8-year extension of the solar ITC. However, the economic downturn has muted its effectiveness. We are now discussing making the ITC refundable, to allow investors to claim it even in a year they have no tax obligation.
2. *Increase government procurement.* Federal procurement has the potential to dramatically increase demand for solar power. To unleash this potential, we need to authorize federal agencies to enter into 25 year power purchase agreements for power that comes from renewable sources. This would help make renewable power cost competitive with traditional electricity.
3. *Tax incentives for solar manufacturing.* Many countries offer tax incentives for manufacturers to locate there. To even the playing field we are discussing accelerated depreciation for solar manufacturing equipment and/or a 30% refundable tax credit for the purchase of manufacturing equipment used to produce solar technologies.
4. *National renewable portfolio standard with solar set-aside.* The Obama team has endorsed a national RPS of 10% by 2012 and 25% by 2025 from renewables. Solar supporters are currently advocating for the RPS to include a set-aside for solar. This would ensure that a given percentage of the renewable power – say, 30% – would come specifically from solar.

5. *DOE solar appropriations.* Finally, there are numerous proposals to increase the federal funding for solar research, development, demonstration and commercial application projects.

There has also been much discussion in recent months of programs to stimulate the creation of “green collar” jobs such as in the fields of energy efficient retrofits of existing commercial and residential buildings or the installation of solar panels.

This is a priority of the incoming Obama administration that I whole-heartedly support! Not only will green jobs programs help in our transition to a cleaner energy economy, they will create good jobs quickly and stimulate our economy. In order to ensure that Arizona is prepared to receive and channel federal funds dedicated to green-collar job creation, we must work at the state level to identify training programs and specific projects that meet the criteria of promoting energy efficiency and renewable energy. The better organized we are now, the better positioned we’ll be to take advantage of federal funding when it becomes available.

There will always be solar power in Arizona – our natural gifts of sunshine and open space make that a certainty.

The question is whether our state will be content to be a mere customer for solar technologies? Or will we seize the opportunity to become true leaders in this emerging global industry?

We can lead, but only if we act swiftly and collaboratively.

Talk is fine, but we need action!

Let us resolve, here and now, that we will not look back 20 years from today and mourn what might have been. Rather, let us commit to bold action so that we can reap the benefits and dominate the solar industry.

Now is the time to diversify our economy and create a new generation of high-paying jobs. Now is the time to lay the foundation for a prosperous Arizona for the 21st century. Now is the time for solar. Let's make it happen.

Thank you again for coming today, and for all you are doing to make a solar Arizona a reality. I look forward to working together with all of you on the exciting road ahead.

###