

# Photon

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## Solar cells on fire

Our first market survey on firing furnaces shows key features of sintering tools for metallic contacts

### EU PVSEC review

Disappointing show, but good conference characterized Europe's leading science event

### Etching PERC et al

Wet etching equipment survey shows suppliers focusing on tools for next cell concepts

### Beyond 29 percent

Ideas for inexpensive high-efficiency solar cells based on crystalline silicon

### New thin-film attempt

Austrian start up launches pilot production of thin-film modules using CZTS cells



## Congress needs to pass new energy efficiency law

One of the most inefficient uses of time right now is trying to figure out why Congress can't pass new energy efficiency legislation, which is widely supported by both Republicans and Democrats.

For most people, it's a no-brainer.

Improved energy efficiency should be a national priority – not a political football. Today, there's a never-ending list of low-cost, off-the-shelf technologies that can improve energy efficiency and pay for themselves over a short period time.

The Energy Savings and Industrial Competitiveness Act, also known as Shaheen-Portman, will help to reduce our nation's energy bill, improve our economic competitiveness, create new American jobs and enhance US energy security. It has been endorsed by a coalition of more than 200 businesses, trade associations and advocacy groups, including the Solar Energy Industries Association (SEIA).

Sens. Jeanne Shaheen (D-N.H.) and Rob Portman (R-Ohio) deserve tremendous credit for moving this common-sense legislation forward and for keeping the issue of energy efficiency on the front burner in Congress.

As the second largest consumer of energy in the world – second only to China – it's critically important for the US to improve energy efficiency. Take the use of computers, for example. By some estimates, a typical computer uses between 65 to 250 W, while a monitor burns another 35 to 80 W. Multiply that by 310 million computers spread across the US and you're looking at a tremendous amount of electricity used every single day – just to power our computers!

Among other things, Shaheen-Portman requires the federal government, as the largest energy user in the US, to come up with new energy-saving features for its computers. This will not only save energy – but also taxpayers' money. According to the Energy Information Administration, residential and commercial buildings currently account for nearly three-fourths of all electricity usage in the US. Reducing the amount of wasted energy will help our economy as well as the

environment. Sen. Shaheen said it best: »The cheapest energy is the energy we don't use.«

To help reduce wasted energy, Shaheen-Portman also:

- Strengthens national model building codes to make new homes and commercial buildings more energy efficient.
- Provides incentives for private sector investment in commercial, industrial and municipal building efficiency upgrades.
- Helps manufacturers reduce energy use and become more competitive through efficiency upgrades.
- Allows federal agencies to use existing funds to update plans for new federal buildings, using the most current building efficiency standards.
- Establishes a new DOE program – SupplySTAR – to help companies make their supply chains more efficient.

America's solar energy industry is also doing its part to help. Today, more than 30 utility-scale clean energy projects are under construction, putting thousands of electricians, steelworkers and laborers to work and helping to reduce carbon emissions. These facilities, along with rooftop solar on homes, businesses and schools, will help to generate clean, abundant energy for generations to come. What's more, innovative solar heating and cooling systems are offering American consumers, businesses and schools cost-efficient, effective options for meeting their energy needs, while reducing their energy consumption.

As an industry, we are very concerned about climate change. It's a real and growing threat to America and the rest of the world.

Shaheen-Portman is a smart, common-sense approach to fighting climate change, by reducing the amount of energy we use and waste.

From improved building efficiency, to increased R&D, to government cost-saving programs, Shaheen-Portman is a balanced, pragmatic approach to getting the biggest bang for our buck when it comes to energy. This is one opportunity that we simply can't afford to waste. ● rr



▲ Rhone Resch, president of the US Solar Energy Industries Association (SEIA), writes a monthly column on solar power in the US.

RfP issued in August 2011 for the financing, construction, ownership and operation of renewable energy generation facilities. New Generation Power was selected to build a 5 MW solar park and a 3 MW wind power facility, while International Electric Power LLC was chosen to build a 5 MW solar park. The total development and construction cost of these projects is expected to be approximately 30 million KYD (\$36 million). CUC and the developers are currently negotiating power purchase agreements, but purchase

prices are expected to range from approximately 0.14 to 0.20 KYD per kWh (17¢ to 24¢ per kWh), which is between 4.5 and 10.5 CI cents (4.7¢ and 12.6¢) lower than the per kWh cost of diesel fuel. The projects are expected to be completed in the first quarter of 2015, assuming permitting and regulatory approval goes as planned.

### Mexico ➡

**Hareon plans \$250 million solar project in Mexico.** Chinese solar manufacturer

Hareon Solar Technology Co. plans to build a large-scale PV power plant in the Mexican state of Oaxaca, according to local news portal Oaxacain.com, which cites a statement from the state's Secretary of Economic Development and Tourism Jose Zorrilla de San Martin Diego. The company expects to invest \$250 million in the project, which has yet to receive authorization from Mexico's Federal Electricity Commission (CFE). The article does not disclose the size of the proposed project, but it notes the Hareon is ready to start construction