

CONTENTS

A Note from the President.....1
Q&A With Alliance Partner Opower....2
China Energy Mapping Tool.....3
New China-SF MOU.....3
ChinaSF-Alliance Roundtable.....4
China NDRC DSM Study Tour.....5

CONTACT INFORMATION

China-US Energy Efficiency Alliance
One Embarcadero Center, Suite 1550
San Francisco, CA, 94111

Phone: 415-951-8975
Fax: 415-983-9984

info@chinausealliance.org
www.chinausealliance.org

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A NOTE FROM THE ALLIANCE PRESIDENT

Dear Friends and Colleagues:

I am delighted to have the opportunity to catch up with you; these past six months have been exciting and I hope you enjoy the updates provided in this newsletter.

► I am very pleased to announce the latest member of our Leadership Council: Steve Malnight, Vice President of Customer Energy Solutions at PG&E Corporation. With Steve's experience and enthusiastic support for the mission of the Alliance, he will undoubtedly provide valuable guidance and insights as we move forward with our activities.

► I also want to welcome our two newest Partners – Opower and EnerNOC. These companies provide important contributions to the energy efficiency goals of utilities and customers. We are grateful for their support and look forward to working with them as part of the Alliance network. We talked with Opower's Nadeem Sheikh (page 2) and will be profiling EnerNOC in a future publication.

► I want to focus on one major development in China. As most of you know, China has established laws and policies requiring reductions in energy intensity throughout the country. In November, four cities were selected for pilot projects: Beijing; Suzhou of Jiangsu Province; Tangshan of Hebei Province; and Foshan of Guangdong Province. These pilot projects are important for identifying and implementing practical programs that can achieve real efficiency improvements that can be scaled up nationwide.

Recently, a delegation of key decision makers from China, including representatives from the four cities, participated in a study tour of cities in US and Canada to learn about how energy efficiency projects are managed at municipal level. The Alliance worked with The Natural Resources Defense Council to help arrange the west coast portion of the study tour which was led by officials from China's National Development and Reform Commission.

► If you want to learn more about the Alliance's activities and events, as well as more regular updates on energy efficiency, start by visiting our website at: www.chinausealliance.org where you can read our blog. If you prefer to receive updates via social media, you can also find us on [LinkedIn](#), [Twitter](#) @ChinaUSAlliance and [Facebook](#). Join the conversation!

Please contact me or my colleague Fran Schulberg, (Alliance Executive Director) if you have any questions or comments, or if you would like to join the Alliance.

With best wishes,



Barbara



Q&A WITH NEW ALLIANCE PARTNER OPOWER

This past July, the Alliance welcomed **Opower** to our distinguished group of Partners. Opower works with utilities across the globe to provide energy data, energy reports, and an energy efficiency software platform to help both consumers and utilities save more energy. The Alliance had the opportunity to learn more about Opower in a Q&A session with Nadeem Sheikh, Opower's Managing Director – Asia Pacific.

Q: *Energy efficiency will play an increasingly important role in reducing energy use as well as reducing pollutants and emissions in both the US and China. What interested Opower in the Alliance's mission to promote energy efficiency in China?*

A: As demand for energy continues to grow across the globe, energy efficiency will play an increasingly important role in reducing energy consumption and harmful pollutants. For consumers, energy efficiency investments are generally very wise ones – as energy prices rise, they help consumers save money.

Opower's mission is to help everyone, everywhere, save energy. Opower works with utility partners to provide their customers with the insight and information needed to save energy and money. To date, Opower programs have helped customers save over US\$170 million and over 1.5 terawatt-hours of energy.

We believe that promoting energy efficiency is something that resonates across the globe. Over the past year, Opower has expanded internationally, and is now working with utility partners in the US, UK, Canada, France and Australia. We have also developed meaningful relationships with NGOs and governments across the globe to explain the consumer barriers we've seen related to energy efficiency, and share information about how Opower's model can overcome them. We believe that China has already taken very positive steps towards a more energy-efficient future and we would like to help.

Q: *What would you like to share with the Alliance's network about Opower and what makes it unique?*

A: Opower is the only customer engagement solution for utilities that has been proven at large scale and around the world. Opower works with over 75 utility partners in six countries to help their customers save energy and money. Opower provides customers with context on how much energy they are using, and how that compares to similar homes; we also provide customers with personalized tips for how to save energy and money.

We rigorously measure our impact, which has been proven to save customers 1.5-3.5% on their energy bills. Our programs are run as independent experiments and the results have been verified by leading universities and researchers. MIT Professor Hunt Alcott recently noted in the Journal of Public Economics that Opower's work represented "one of the largest randomized field experiments in history", touching millions of homes.

Five years ago, Opower pioneered the use of principles from the field of behavioral science to engage consumers on their energy use. Since then, we've run hundreds of experiments, reaching millions of consumers to refine our understanding of what motivates customers to save. Our engagement model has translated well across many cultures, countries, and languages and taps into behavioral norms that are common across cultures. We believe these same techniques may eventually be helpful in China as well.



Q: *Do you have any thoughts about how Opower might become involved in promoting energy efficiency in China?*

A: In places like California, where we have many programs with utilities, the regulatory system encourages efficiency not only in the industrial sector, but also for end consumers. In our work across the world, we have encountered many different types of regulatory models and incentives related to residential energy efficiency, and would be glad to share insights on what policies work best and how they might be tailored to China.

As energy demand in China continues to rise, energy efficiency will continue to play an important role in managing energy consumption. Opower is already working with a number of international partners, and we think that our program could have a similar impact in China.

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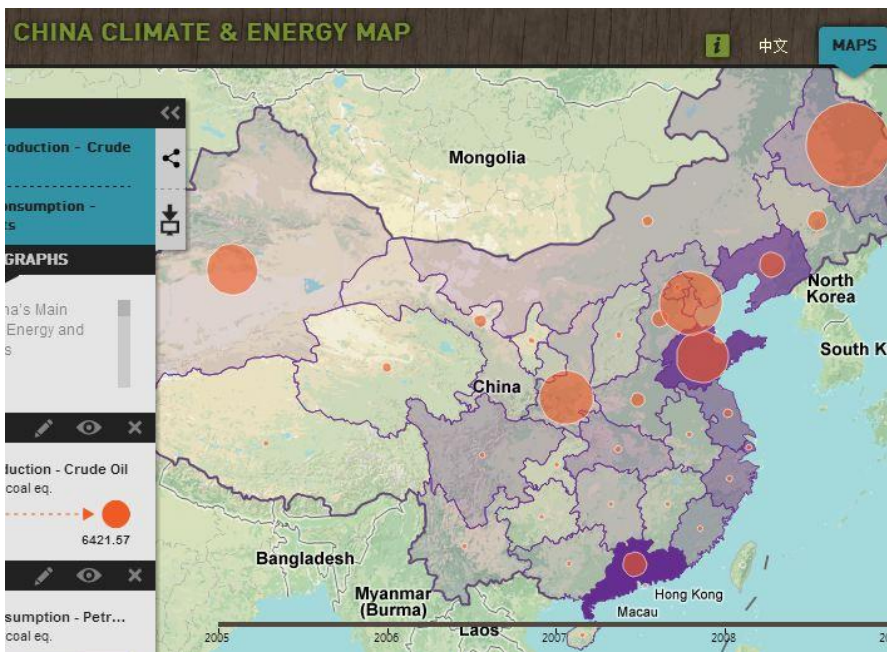
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*New to Leadership Council

CHINA ENERGY MAPPING TOOL



Screenshot from the China Energy Map show areas of crude oil production

The China Climate & Energy Map (CCEM) at www.chinaenergymap.com, was recently launched by the NRDC, and is a first-of-its-kind platform to visualize, aggregate, and explain energy and climate data for China in the years 2005-2010.

The bilingual platform uses provincial-level data mapping and graphing tools paired with a policy guidebook to provide policymakers, researchers and the public with insights into China's energy situation and trends, and policies to develop more sustainable energy sources.

The China Climate & Energy Map is managed by Anthony Suen of NRDC's China Program. Anthony is also the Co-Founding Director of Energyfolks, an ARPA-E funded social venture designed to connect and empower energy communities worldwide with a common information platform.

Please send any feedback on the map and recommendations for improvement or additional datasets to: anthony@energyfolks.com.

SAN FRANCISCO SIGNS HISTORIC ENERGY EFFICIENCY AGREEMENT WITH CHINA

In June 2012, the [City of San Francisco](http://www.sfdem.org) signed a Memorandum of Understanding (MOU) with the National Energy Conservation Center of China's [National Development and Reform Commission](http://www.necchina.com). The MOU is geared toward facilitating cooperation on the promotion of energy efficiency and sustainable development.

The purpose of the MOU is to provide a cooperation framework for the participants to implement energy efficiency activities. Both sides agreed to cooperate on research, technology, and marketing in the field of energy efficiency, in addition to discussing the design and deployment of energy efficiency products and technologies at both the local and national levels.

Both the National Energy Conservation Center and the City of San Francisco will work toward achieving these objectives through a combination of capacity building programs, training workshops, investment promotion activities, and demonstrations of energy efficiency technologies.

One potential local benefit of the MOU from San Francisco's perspective is to promote more Chinese investment in San Francisco area businesses, while also boosting the exchange of best practices in energy conservation between China and the US. The MOU was signed by Director General Li Yangzhe of the National Energy Conservation Center of China, and Jennifer Matz, Deputy Mayor of the [Office of Economic and Workforce Development](http://www.sfdem.org) of the City and County of San Francisco.

The Alliance presented a roundtable discussion to further examine the MOU and its Implementation this past August – this is described in detail below.

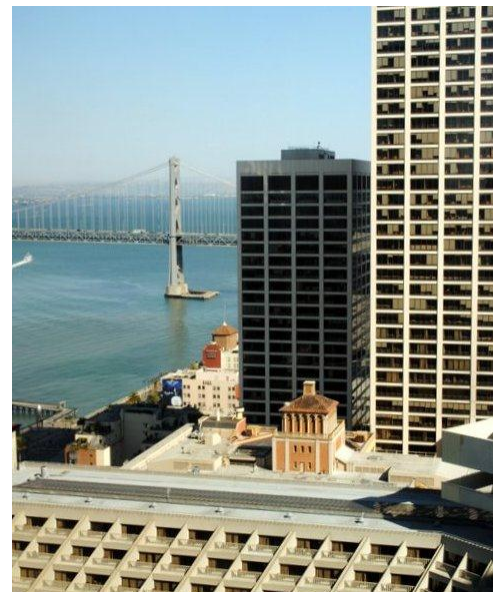


Photo of downtown SF by Emily Peckenham

ALLIANCE ROUNDTABLE EVENT: “CHINA-SF COOPERATION ON ENERGY EFFICIENCY: WHAT DOES IT MEAN FOR YOUR BUSINESS?”

The China-US Energy Efficiency Alliance organized a roundtable event on August 13 to discuss the new San Francisco – China memorandum of understanding (MOU) to cooperate on energy efficiency (read more about the MOU, page 3). The event was co-sponsored by the US Commercial Service and hosted by Bingham McCutchen LLP in their San Francisco office.



Stephan Crawford, Director of the US Commercial Service, SF

Terry Fry, Senior Vice President at Nexant and member of the Alliance Board of Directors, welcomed the audience and introduced the : Darlene Chiu Bryant, Executive Director of ChinaSF; Guillermo Rodriguez, Director of Policy and Communications at San Francisco Department of Environment; and Stephan Crawford, Director of the US Commercial Service San Francisco office.

The speakers provided insights on the content and context of the MOU, and explored what it could mean for local businesses. Darlene Chiu Bryant noted that the MOU will “. . . give us an opportunity to bring San Francisco companies, who are the leaders in clean tech and green tech, to China.”

It was pointed out that the MOU was a direct result of San Francisco and California’s international leadership on energy and environmental issues.

To implement the MOU, the city of San Francisco will work through ChinaSF and SF Environment while in China the lead agency will be the National Energy Conservation Center (NECC). To help ensure that this MOU is put into action, and is not just ceremonial, the city of San Francisco requested that the Chinese government identify partner cities. At the Roundtable, representatives from ChinaSF and SF Environment announced that Nanchang would be the first partner city.

Nanchang, a mid-sized city in China, is the capital of Jiangxi Province. Although it has a population of around seven million – and San Francisco’s population is only about one million - the two cities have many things in common. Nanchang is an old city with much existing infrastructure as well as dynamic growth opportunities. The Chinese city is currently exploring a

redevelopment project similar to San Francisco’s Hunter’s Point Shipyard. Both cities have shared interests in addressing challenges related to new development and existing infrastructure.

The panelists shared details on the redevelopment project in Nanchang, which consists of 200 acres of vertical development on former industrial land. The project will be mixed use, and Nanchang is looking for help with master planning, infrastructure development and sustainability.

Guillermo Rodriguez of SF Environment outlined five objectives that the city hopes to accomplish under the MOU:

- Assemble a consulting team to work with Nanchang on their redevelopment project;
- Bring interested Chinese energy service companies (ESCOs) to the San Francisco area market;
- Encourage Chinese financing agencies to look at investments in energy efficiency in San Francisco;
- Connect US energy efficiency businesses with their Chinese counterparts; and
- Announce progress on the MOU at the next annual national-level energy efficiency forum between the US Department of Energy and the Chinese NDRC, planned for May 2013.



(L-R): Darlene Chiu Bryant, Guillermo Rodriguez, and Terry Fry

Terry Fry of Nexant noted that “...cities [in China] have directives to be smart cities, clean cities, sustainable cities – and they have no idea what that means. There are people here who have done that before. On the Chinese side they are looking for people they can invest in.”

Stay tuned for a follow-up event in 2013, details will be posted on the Alliance website.

–Prepared with Linden Ellis

CHINA'S NDRC LEADS STUDY TOUR TO US AND CANADA

In December, the Alliance worked with the Natural Resources Defense Council to organize the west coast portion of a study tour on energy efficiency and demand-side management for a visiting delegation of Chinese officials.

Before coming to San Francisco, the delegation visited a series of cities in the US and Canada including Washington, Philadelphia, New York, Toronto, and Vancouver, where they met with local officials and energy efficiency companies to learn more about practical demand-side management (DSM) implementation strategies at municipal level.

The study tour was led by China's National Development and Reform Commission (NDRC) and included government officials at both central and local levels in addition to representatives of Chinese utility and grid companies.



Members of the NDRC Study Tour take notes at the Pacific Energy Center

The tour was particularly timely since the NDRC and the Ministry of Finance of China recently announced plans to scale up the national DSM pilot city program with financial incentives from the central government. The study tour included delegates representing several of the four cities which were recently selected to become DSM pilot cities, *i.e.*, Beijing, Suzhou (Jiangsu), Tangshan (Hebei), and Foshan (Guangdong). Each city has an electricity load reduction target of 800 MW, 1GW, 580 MW and 600 MW respectively over the next three years. The Ministry of Finance will provide ~1 billion Yuan RMB incentives for the project.



Cal Broomhead of San Francisco's Department of Environment introduces "Phoebe the Phoenix", used in children's educational sessions

Furthermore, China's central government enacted national DSM regulations which came into effect in January 2011. Under the regulations, grid companies are required to use a portion of their electricity revenues to develop DSM programs, and must meet the savings targets each year.

In Vancouver, the Alliance and NRDC arranged a visit with BC Hydro and the City of Vancouver.

On their day in San Francisco, the delegation was generously hosted by PG&E in downtown San Francisco's Pacific Energy Center. There, the delegation heard in-depth presentations from representatives of PG&E, EnerNOC, Nexant, ChinaSF, the San Francisco Department of Environment, and the Lawrence Berkeley National Laboratory.

Over lunch at the San Francisco Hotel Intercontinental, the delegation heard a presentation on how the hotel achieved its LEED gold rating through its construction, maintenance, and ongoing operations.

The Alliance received feedback that the delegation's trip was extremely productive, and that the Chinese officials would be taking back many new ideas and inspiration for ramping up their DSM programs.

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The Alliance would like to acknowledge our Partners for their technical, financial, and in-kind support.

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