# REQUEST FOR ESTABLISHING AN ECOPARTNERSHIP BETWEEN ORGANIZATIONS IN UNITED STATES AND CHINA

The Joint Secretariat of the EcoPartnerships (the Secretariat), co-chaired by the United States of America's Department of State and the People's Republic of China's National Development and Reform Commission, invites new requests for establishing EcoPartnerships between organizations in United States and China.

New EcoPartnerships should be highly motivated, technically and administratively capable of executing actionable and viable projects, relevant to the Framework for the Ten Year Cooperation on Energy and Environment (TYF) between the Government of the United States of America and the Government of the People's Republic of China, through technical cooperation, demonstration and/or policy exchanges. New EcoPartnerships should sufficiently respond to the following process demonstrating both programmatic competence and budgetary capacity to successfully implement the intended activities.

The partners must demonstrate their initial interest and details of the collaboration in the Statement of Interest below, and submit it on the Secretariat's website for consideration, at: www.ecopartnerships.gov/ and/or www.ndrc.gov.cn/. The Secretariat will evaluate applications based on the Criteria found on the Secretariat's website. Based on this review, Candidates selected by the Secretariat for the EcoPartnership Program will then be asked to complete a Statement of Intent with a detailed Action Plan (template found on the respective websites).

#### STATEMENT OF INTEREST

| The EcoPartnership focuses on one or more goals of the TYF Action Plans: |                                                                     |                                                                 |                       |
|--------------------------------------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------|
|                                                                          | Clean air                                                           | X Clean water                                                   | X Clean and efficient |
|                                                                          |                                                                     |                                                                 | transportation        |
| 2                                                                        | Energy Efficiency                                                   | gy Efficiency X Conservation of forests and wetlands ecosystems |                       |
| 2                                                                        | Clean, efficient and secure electricity production and transmission |                                                                 |                       |

US Partner: Coastal Bend Council on Energy & Environment, a division of the World Affairs Council of South Texas, a Texas non-profit 501 (c) 3 corporation. The Purpose of the Coastal Bend Council on Energy and Environment is to advance Energy Security, Economic Sustainability, and Environmental Sustainability.

#### **Members of the Council:**

- City of Corpus Christi
- Port of Corpus Christi Authority
- San Patricio County
- Texas A&M University-Corpus Christi
- Del Mar College
- Harte Research Institute
- Texas A&M AgriLife Research and Extension Service Center.
- Topaz Power Group
- American Electric Power Texas
- E.ON Climate & Renewables NA
- Richter Architects
- Corpus Christi Regional Economic Development Corporation

#### **Council Officers**

#### Chair:

Joe Adame, Mayor, City of Corpus Christi

#### **Vice Chairs:**

- Dr. Flavius Killebrew PhD, President, Texas A&M Corpus Christi
- Dr. Mark Escamilla PhD, President Del Mar College
- Judge Terry Simpson, Judge, San Patricia County
- John LaRue, Executive Director, Port of Corpus Christi Authority
- Dr. Martin Johnson MD, President, World Affairs Council of South Texas.

### Contact Information, US

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Web Site: www.worldaffairstexas.com

**Chinese Partners**: Our Chair, Mayor Joe Adame, presented our EcoPartnership proposal, in China, to officials of the <u>City of Tianjin</u>, our proposed partner, in late October of 2010. Mayor Adame was accompanied by senior officials from the Texas Governor's Office, the Port of Corpus Christi, and the Regional Economic Development Corporation. Tianjin agreed to move forward with us to the next step. Our two ports have been discussing this partnership for one year

### Contact Information, China,

Point of Contact: Victor Zhao. Vice Chief, Tianjin Municipal Economic and Information

Technology Commission, E-Mail: victorvzhao@163.com

and

Ms. Yang Liu, Deputy Director, Sino-Singapore Tianjin Eco-City

E-Mail: yangl@eco-city.net.cn

### Project Concept\_&\_relationship to TYF:

We have formally offered the following projects to the City of Tianjin. Our plan is that the two entities jointly will select several of these items to begin our work together.

### **Clean Air:**

Coastal Bend Partners: City of Corpus Christi, Port of Corpus Christi, Texas A&M University-Corpus Christi, Texas A&M University-Kingsville, AEP Texas, and E.ON Climate & Renewables

We have a very successful and award-winning Pollution Prevention Partnership program (<a href="http://outreach.tamucc.edu/aqsmbusiness.html">http://outreach.tamucc.edu/aqsmbusiness.html</a>) that works with citizens, business, and industry to reduce air pollution in the region. Through this partnership, governmental, transportation, industry, and educational entities cooperate on the overall goal of understanding and managing air quality in the region.

We have multiple partners involved in traditional and renewable energy production with interests in efficient and clean energy.

### **Clean and Efficient Transportation:**

Coastal Bend Partners: City of Corpus Christi, and Port of Corpus Christi

In addition to emissions modeling done on both point and mobile sources through the Pollution Prevention Partnership, the City of Corpus Christi supports use of Compressed Natural Gas and Alternative Fuel Vehicles.

CNG Vehicles: http://www.cctexas.com/?fuseaction=main.view&page=3987

The Port of Corpus Christi is interested in comparing best practices with the Port of Tianjin.

## Clean, Efficient, and Secure Electricity:

Coastal Bend Partners: City of Corpus Christi, Port of Corpus Christi, San Patricio County, Texas A&M University, Topaz Power Group, American Electric Power, and E.ON Climate and Renewables

We have many possible areas of partnership in this category, including wind power, smart electrical grid and smart electrical meters, and algae as a biofuel (which captures flue gases from the power plant, reducing CO2 emissions)

The City of Corpus Christi, Texas AgriLife Research, Topaz Power, Texas A&M University-Corpus Christi, and Texas A&M University-Kingsville are collaborating on a research initiative for developing a regional algal biofuel demonstration plant using flue gas from a local power plant and city wastewater effluent for algae ponds.

E.ON Climate and Renewables is a wind-energy company with 380 megawatts of wind energy production in the Coastal Bend region. E.ON is open to the possibility of sharing experiences with Chinese partners.

The City of Corpus Christi Energy Management Program uses multiple strategies to reduce city energy consumption: <a href="http://www.cctexas.com/?fuseaction=main.view&page=3924">http://www.cctexas.com/?fuseaction=main.view&page=3924</a>

### **Clean Water:**

Coastal Bend Partners: City of Corpus Christi, Port of Corpus Christi, and Texas A&M University-Corpus Christi

The City of Corpus Christi provides clean water and drinking water to hundreds of thousands of citizens in our community. One of the primary focuses of our water quality program is the education of our community on conservation and methods of reducing consumption. The City would be interested in discussing the management of drinking water resources with Chinese partners. <a href="http://www.cctexas.com/water/index.cfm">http://www.cctexas.com/water/index.cfm</a>

On the research side, Texas A&M University's Center for Water Supply Studies does research and outreach related to water quality issues. It works with community conservation agencies and federal agencies to address issues related to surface and subsurface water. This Center would be interested in Chinese research partners. <a href="http://artesian.tamucc.edu/">http://artesian.tamucc.edu/</a>

Texas A&M University also houses the National Spill Control School. This school provides training for handling oil spills and hazardous material spills. It would be interested in collaborations with Chinese partners. <a href="http://www.sci.tamucc.edu/nscs/">http://www.sci.tamucc.edu/nscs/</a>

Monitoring of bays and estuaries is a function of both the City and partners such as the Coastal Bend Bays & Estuaries Program to ensure that prevention and control of pollution in our waterways is a priority. <a href="http://www.cbbep.org/">http://www.cbbep.org/</a>

## **Energy Efficiency:**

Coastal Bend Partners: City of Corpus Christi, Port of Corpus Christi, AEP Texas, Del Mar College, and Richter Architects

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AEP Texas is a leading Texas energy company and an expert in operating in competitive energy markets. Texas deregulated its energy markets between 2000 and 2002. In doing so, the state required that electric utilities administer energy efficiency incentive programs in a market-neutral nondiscriminatory manner. AEP Texas would be interested in sharing its expertise with Chinese partners in discussing market-based programs and market transformation programs related to energy efficiency.

AEP is involved in developing and deploying an Advanced Metering System through the AEP Texas service territory to provide its customers with advances in controlling their energy usage and costs, and to evolve AEP Texas' distribution capabilities, reliability and efficiency.

Del Mar College offers a new associate degree in Alternative Energy Engineering Technology. Students are trained in skills related to electrical equipment, power and power distribution, wind power, and fuel cell technologies.

Richter Architects, an architecture firm based in Corpus Christi, has extensive expertise in design and planning of energy efficient and environmentally sensitive architecture and master plans. The firm is a leader in sustainable design, with both of the firm's senior principals LEED accredited professionals. Richter Architects is currently the architect of a new Land Port of Entry at Columbus, New Mexico for the United States government that is slated to be the nation's first net-zero-energy land port.

### **Protected Areas/Nature Reserves:**

The City of Corpus Christi Parks and the region have extensive experience with protected areas and nature reserves. An example is the Oso Bay Wetlands Preserve: http://www.cctexas.com/?fuseaction=main.view&page=3619

### **Wetlands Conservation:**

A number of civic groups in the area also help protect natural areas. Those include the Coastal Bend Bays & Estuaries Program. <a href="http://www.cbbep.org/">http://www.cbbep.org/</a>

The City of Corpus Christi supports the Coastal Bend Bays & Estuaries Program in their efforts to enhance bays and estuaries. In addition, Wetlands Conservation is a key function of the General Land Office and the U.S. Army Corp. of Engineers. Any project proposed by the City of

Corpus Christi or any entity that requires disturbance of sensitive wetlands requires a permit and stringent wetlands mitigation plan as a component of the project and permit issuance.

A number of research institutes at Texas A&M University are also involved in the study of wetlands and nature reserves.

The Harte Research Institute for Gulf of Mexico Studies does research related to the long-term sustainability of the Gulf of Mexico. The Yellow sea has a lot of parallels for the Gulf of Mexico – surrounded by a number of countries (multi-national management issues), one of which has diplomatic issues (Cuba and N Korea). Heavy industrialization along coast, freshwater inflows of concern (both quantity and quality), overfishing and still many very special areas worthy of protecting. The Harte Research Institute would like to partner with a similar Chinese research institute. <a href="http://harteresearchinstitute.org/">http://harteresearchinstitute.org/</a>

The Center for Coastal Studies does research related to marine and coastal ecological research. It would also be interested in Chinese partners. <a href="http://www.sci.tamucc.edu/ccs/">http://www.sci.tamucc.edu/ccs/</a>

### **Education enhancement:**

Both Del Mar College and Texas A&M University-Corpus Christi would be interested in sharing curriculum and research, promoting student and faculty exchanges.

## **Encouraging Sustainable Economic Development:**

The Corpus Christi Regional Economic Development Company and all the other Council partners are committed to this concept and would welcome opportunities to collaborate and benchmark with their Tianjin partners to find ways to do this better.

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**Proposed Timeframe:** We propose to begin in the second quarter of 2011 and to last five years. Hopefully though the relationship will become permanent.

## **Anticipated Outcome:**

#### China and the U.S. Partnering for Success Sharing Best Practices, Fostering Innovation, Encouraging Sustainable Economic Development

Most of the anticipated outcomes are listed above, in the Project Concept. Long-term partnership between the Corpus Christi region and the Tianjin region will address a number of environmental, energy and development issues. Although there are many unknowns tied to how and what benefits could become of this relationship, we believe shared best practices and exchange of business and trade development leads are areas we all strive to seek. In the sharing of technological advancements in all subject areas identified, our communities intend to draw upon best practices to create economic opportunities for the Coastal Bend region and strengthen the ties between our communities, which have already been nurtured with the Tianjin region of China. By creating an ECO-Partnership with the Tianjin region in China, South Texas will be afforded many new opportunities to further strengthen and expand the harmonious relationships that were created by the two regional economic development organizations in 2007. For example, we can now leverage additional business and trade relationships to generate new opportunities in renewable energy, water/waste water management systems, environmentallyfriendly and energy efficient construction and develop more efficient Port-to Port transportation opportunities. By sharing our mutual technical competencies and expertise, both countries will socially benefit via the enabling of new clean resource efficiencies and related economic development projects. These new partnerships will be only the beginning of fostering new cultural, educational and sustainable economic development initiatives to the mutual benefit of all participants

**Benefits to the US:** The benefits include creating dialogue and harmonious relationships between our two countries and furthering a partnership between our community institutions whose economic futures as it relates to our ports and existing business interests are already linked to one another. We believe that <u>Energy Security</u>, <u>Economic Sustainability</u>, and <u>Environmental Sustainability</u> will be enhanced.

**Benefits to China:** The benefits to China are to give the Chinese comfort that our community is interested in both economic ties, which are already underway, and cultural, educational, and civic exchanges in bringing our about greater harmony and cultural awareness between our communities. We believe that China's <a href="Energy Security">Energy Security</a>, <a href="Economic Sustainability">Economic Sustainability</a>, and <a href="Environmental Sustainability">Environmental Sustainability</a> will also be enhanced.

**Technical Competence of US Partners:** The partners identified by our team are all nationally recognized as experts in their field. They will provide the subject matter expertise in all areas we have identified an interest in pursuing through this EcoPartnership opportunity, to ensure that the dialogue is meaningful, technologies are fully grasped, and decision makers have enough useful information to move our partnership forward.

## Technical Competence of Chinese Partners: As previously

stated, our Regional Economic Development Corporation, in the interest of pursuing an economic opportunity with Tianjin, has already laid the groundwork with Chinese officials to ensure a commitment is gained and our partnership is successful. We feel confident that our Chinese partners will be highly competent. We expect that partners on both sides will have something to share, something to learn. We will learn and grow together.

**Financial Resources:** While financial constraints will always be present, our economic prosperity as a community (region and as a nation) is integrally linked to the Chinese for specific projects. We will continue to make the necessary financial commitment to further our goals as it pertains to this proposed Eco-partnership. Cost is anticipated to be shared by the community, which is the purpose for the wide array of stakeholders identified in our proposal.

#### **TERMS EXPLAINED**

**BACKGROUND OF ECOPARTNERSHIPS:** The Government of the United States of America (US) and the Government of the People's Republic of China (China) signed the TYF on June 18, 2008; during the 4th US-China Strategic Economic Dialogue (SED) and officially started this important bilateral cooperation mechanism to engage in extensive cooperation in energy and environment within a time span of ten years and jointly tackling the challenges of sustainable development, climate change and energy security. The US and China signed the Framework for EcoPartnerships under the TYF in December 2008; during the 5th SED.

The EcoPartnerships Framework is to advance energy security, economic sustainability and environmental sustainability, and address climate change by encouraging voluntary, cooperative partnerships between enterprises and academic/research/management/training entities, and other nongovernmental organizations and associations; states, cities, counties and other localities in US and provinces, cities, counties and other localities in China; or any combination of the above. The EcoPartnerships Framework states that these partnerships "are to leverage the accomplishments of the TYF task forces by providing opportunities to test and demonstrate the policies, technologies, and new approaches at sub-national levels. EcoPartnerships are also to facilitate innovations that may include development, commercialization and deployment of energy and environmental technologies."

Further information on EcoPartnerships is available on the Secretariat's website: www.ecopartnerships.gov/ and/or www.ndrc.gov.cn/, including seven existing EcoPartnerships.

**PROJECT CONCEPT** should briefly highlight the energy, environment, climate change, technical and/or economic goals of the cooperative partnership and articulate the partnership's relevance and contributions to one or more of the TYF Action Plans.

**ANTICIPATED OUTCOMES** should be identified reflecting environmental, energy, climate change and economic benefits, including, but not limited to, the following:

- Enhanced technical, planning or policy capabilities of the partner;
- Reduced negative impact on the environment (e.g. resource consumption, pollution emissions, including greenhouse gases, waste, loss of forest cover);
- Enhanced resource productivity in the economy (e.g. economic efficiency);
- Expanded effects of environmental improvement on society (e.g. congestion costs, improvement in wellbeing, social costs);
- Expanded policy interactions on implementing/deploying incentives for cleaner options;
- Increased R&D and/or educational exchanges between the two countries;
- Expanded commercial exchanges and attendant job creation and income generation within two countries;
- Increased promotion, deployment and adoption of advanced clean technologies.

**BENEFITS TO US AND CHINA** should clearly outline measurable impacts for each country in terms of energy, environmental, economic, technical and/or social benefits and scalability of techniques/strategies. Priority will be given to applicants who, in addition to addressing at least one of the TYF goals, also demonstrate climate change benefits.

**TECHNICAL COMPETENCE** of both partners should be clearly identified to demonstrate their respective abilities and experience to successfully implement the project in addition to exemplifying usefulness to the partnership.

**FINANCIAL RESOURCE** inputs from both partners should showcase project viability for practically executing it for the proposed duration.