

APEC Concept Note

Please submit through APEC Secretariat Program Director. Concept notes of more than 3 pages (including title page) or incomplete submissions will not be considered.

Project Title:	Workshop to support the development of implementation policy strategy of high albedo surface in buildings and pavements within the APEC region
Source of funds (<i>Select one</i>):	<input type="checkbox"/> Operational Account <input type="checkbox"/> TILF Special Account <input checked="" type="checkbox"/> APEC Support Fund
Committee / WG / Sub-fora / Task-force:	Energy Working Group/ Expert Group on Energy Efficiency and Conservation (EGEEC)
Proposing APEC economy:	USA
Co-sponsoring economies:	Mexico, Japan, Thailand, China,
Expected start date:	January 1, 2014
Expected completion date:	November 30, 2014
Project summary: Describe the project in under 150 words. Your summary should include the project topic, planned activities, timing and location: <i>(Summary must be no longer than the box provided. Cover sheet must fit on one page)</i>	<p>The purpose of this project is to support an energy efficient buildings envelope surfaces workshop and stakeholders meeting. The workshop and meeting will take place in Mexico, September 14-15, 2014. The workshop will bring together the range of public, private and academic sector experts and stakeholders involved in policy and codes development to specify advanced building envelope material use to achieve necessary energy efficiency targets in the APEC region. Discussion will centre on adoption of common rating methodology for energy use impact study, required infrastructure and policy for uniform policies and codes implementation within APEC countries. Fundamental infrastructure and related capacity building activity, is a prerequisite to effective building policy adoption. Establishment of a common methodology for energy savings Impact study will serve as a template to be replicate in other APEC economies.</p> <p>This project directly supports the Energy Smart Communities (ESCI) and this project is a major activity of the Smart Buildings-Materials Testing and Rating Centres (SB-2) activity.</p>
Total cost of proposal: (<i>APEC funding + self-funding</i>) USD 105,000	Total amount being sought from APEC (USD): 80,000 <i>By category:</i> <i>Travel:</i> 56,150 <i>Labour costs:</i> 19,850 <i>Hosting:</i> 4,000 <i>Publication & distribution:</i> <i>Other:</i>

Project Proponent Information and Declaration:

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I declare that this submission has been prepared in line with the **Guidebook on APEC Projects**. If approved, I agree to develop the project in line with APEC project requirements.

Name of Project Proponent

Date:

Project Synopsis

1. **Relevance:** Why should APEC undertake this project? What problem or opportunity will the project address and why is it important?

Space conditioning loads that are directly affected by the building envelope (roofs, window, walls, and foundation) are responsible for approximately 30 to 50 per cent of the building consumption. Thus, to reduce the growth of increased demand for electricity and to reduce greenhouse gas production investment in high performance, energy efficient building envelopes are essential. This project will enable APEC building experts, researchers and policy makers to better address energy consumption through improved energy policy and implementation.

This project directly supports APEC ESCI SB2 goal to develop a common methodology for energy saving Impact study analysis, development of required infrastructure to support and implement a building energy code and labeling program for use among APEC economies. This effort will educate other APEC economies on how to perform widely accepted energy efficiency practices to ensure implementation and enforcement of building energy codes. Fundamental investments for energy efficient building envelope using cool surfaces technologies (Roof, wall and windows), and other technological opportunities need to be pursued by all APEC economies and are included in the scope of this project.

2. **Objectives:** Describe the 2-3 key objectives of the project. (e.g. to... create a framework...; ensure participants will be able to...; share experiences...; enhance understanding...; develop recommendations...; build interest...; revise strategies... etc.)

The workshop will present best practices and establish next steps towards the development of common high performance envelope policies, testing protocols, certification programs in APEC member economies.

This workshop will clearly demonstrate the effectiveness of best practice design and technology in addressing building envelope efficiency goals and strategic analysis and policies can be an effectively developed to accelerating the process of implementation of energy-efficient building envelop surfaces.

3. **Alignment:** Describe how the project will help achieve APEC's key priorities and meet your forum's work-plan or medium-term plan.

This project directly supports the 2010 APEC Leaders decision to implement the Energy Smart Communities Initiative (ESCI) for the APEC Building Material Testing and Rating Center (SB2). This project is directly focused on test standard development and harmonization to foster economic growth of energy efficient technologies and to reduce trade barriers.

This project proposal also aligns exceedingly well with both EWG and APEC-wide priorities. This project directly supports the implementation of cost effective energy efficiency technologies that was supported in the Manila Action in 1996 with a call for clean technologies that promote sustainable development. It also aligns directly with the APEC Leader's key ECOTECH priorities of Climate Change, Energy Security and Clean Development. The project also directly supports the EWG 2011 Work Plan by promoting sustainable growth combined with reduced energy intensity.

4. **Methodology:** How do you plan to implement the project? In this section, address:

- **Timeline:** Project timelines and dates for key activities and deliverables
- **Stakeholders:** Beneficiaries and stakeholders (APEC & non-APEC) and how they will be engaged
- **Previous projects/activities:** If and how this proposal builds on the findings or lessons learned from previous projects/activities, while avoiding duplication
- **Communication:** How you plan to communicate the results or benefits of this project to others

The project will be carried out in the following four steps:

1. (one months after project approval) Develop a list of organizations and key stakeholder personnel associated with efficient building envelope surfaces from APEC economies.
2. (two months after project approval) Plan and organize the workshop. The U.S. will work with Mexico to make arrangements for the workshop that will include the following

activities:

- Venue identification. Identify the venue to correspond with a planned EGEEC meeting. Develop Workshop Agenda. The U.S. will develop an initial agenda and submit it for review by representatives from other APEC economies.
 - Identify Appropriate Speakers. Chairs and expert speakers on the development of national lighting design centers will be chosen from both the public and private sector. Identify and target potential participants and experts. Utilize appropriate communication channels to promote good attendance at the workshop.
3. (four months after project approval) *conduct the Workshop*. The workshop will be conducted over a 2-day period with the following schedule of activities:
- Day 1: Presentation by invited speakers
 - Day 2: Develop guideline action plan for APEC framework for building envelope energy efficient policy adoption.
- This will start with developing a general unified plan in terms of how high Albedo surfaces, and other building envelope technologies can be specified in the building energy policies and codes. This model will be presented and developed at the forum with the objective of holding a collective narrative aimed at collaboration.
4. Six months after project approval) follow up the workshop. Relevant papers and presentations will be compiled and published as a Workshop Proceedings. A framework and action plan for next steps will be developed and disseminated. A plan will be developed to continue working with interested economies on the best practice design and technology in addressing building envelope efficiency goals and strategic analysis and policies can be an effectively developed to accelerating the process of implementation of energy-efficient building envelop surfaces.

The workshop is focused on three strategic objectives. The first objective is to highlight the overall importance of deploying high performance building envelope surfaces and adopting best practices. In this initial series of presentations the focus will be on understanding the importance of building envelope surfaces technology and best practices in addressing major greenhouse gas reduction goals. Information will be shared from all participants with the objective of developing a general understanding of effective strategies and approaches for building envelope surfaces energy efficiency. The venue will include highlighting a series of best practice success stories with the lessons learned approach sharing highlights from participants.

The second objective will improve the understanding of how existing building envelope surfaces rating and labelling programs have been operating and highlight key successes and challenges in both the establishment and operation. This portion of the workshop will include a series of presentations from established rating and labelling programs, facilitated by a lead presenter. The presentations will each include a functional overview, management and operation structure, industry and professional interface, key success stories, long-term plan. Each presentation will be followed by a Q&A.

The third objective is to launch a process to establish regional testing centres operating on a common set of product testing, rating and labelling programs. The forum will explain the mechanics, structure, and operation of testing programs and how collective activity could help overcome developmental and intellectual barriers to establishing successful markets. The forum will facilitate collaborative opportunities for these regional centres to work together to share development issues as well as technical content. This section of the forum will include a series of presentations focusing on start up approaches for partnership development, funding, and build out requirements for building envelope surfaces efficiency rating and labelling program. This effort will include multiple presentations focused on past development practices. A key outcome of these presentations and discussions will be a unified template that could be used in the development of new regional building envelope surfaces rating program.