

CMT-06-04: Product Application

Project

This project is to evaluate and document applications of concrete that mitigate the climate change impact of buildings and other aspects; to recommend that Partner countries undertake collaborative research into life cycle energy efficiency of concrete applications; and to identify further steps that governments can take to encourage sustainable development using concrete products.

Participation

Managing Parties

The United States.

Participants (Inquirers)

Relevant ministries and cement associations of Partner countries.

Objectives

To evaluate applications of concrete to mitigate climate change impact.

Milestones

Summarize existing literature and programs to evaluate applications of concrete within 2006.

Identify potential research projects within 2006.

Make recommendations within 2007 or 2008.

Location

Evaluation of existing literature and programs will be conducted in each Country, with the United States as lead Partner.

Resources

The United States.

Detailed Description

The scope of this task is to effort to evaluate and document applications of concrete that mitigate the climate change impact of the particular building or project over the projects service life cycle. This effort may include evaluation of:

Energy Efficient structures: commercial and residential structures built with concrete exterior walls to enhance energy efficiency;

Urban heat island mitigation: light colored concrete absorbs less heat and reflects more light than dark-colored materials – whether on pavement, roofs, or other services, thereby reducing ambient temperatures and demand for electricity;

Vehicle fuel efficiency: because of its rigidity, concrete pavement enhances fuel efficiency of vehicles compared to flexible pavements;

Structural durability: because concrete buildings and pavements last longer, they require less frequent maintenance and replacement, activities that typically involve power consumption and the resulting emissions.

Primary responsibility for evaluating and documenting the climate change advantages of concrete shall rest with the industry members of the Cement Task Force, including trade associations and individual companies. Additionally, The Cement Task Force may recommend that Partner governments undertake basic research into life cycle energy efficiency of concrete applications to residential and commercial structures.

The Task Force will consider the results of this evaluation and will make recommendations to the Policy and Implementation Committee on further steps that governments can take to encourage sustainable development using concrete products.