

**COVER PAGE**

Country: China

5 UNDAF Outcome(s)/Indicator(s): Improved sustainable utilizations and management of natural resources and the environment at national and community levels

10 Expected Outcome(s)/Indicator (s): Increased capacity of national focal points in addressing policy removal of barriers in pursuing local sustainable management of natural resources and environment

15 Expected Output(s)/Annual Targets: Demonstration of sustainable management of energy consumption; and Evidence-based data for barriers removal and policy decision making

Implementing Partner: National Development and Reform Commission (NDRC)

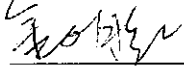
20 Responsible Parties: China National Institution of Standardization (CNIS)

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CPAP Programme Period: 2009-2013  
Programme Component: CPAP  
Project Title: Barrier Removal to the Cost-effective Development and Implementation of Energy Efficiency Standards and Labeling Project (BRESL)  
Project ID: 00971578  
Project Duration: 5 years  
Management Arrangement: NEX

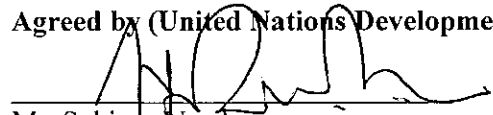
Total Budget: USD 1,300,000  
Allocated resources:  
• Regular  
• Other:  
    GEF USD 1,300,000  
• In kind contributions  
    Government USD 11,000,000

40 Agreed by (National Development and Reform Commission (NDRC))

  
Mr. Jin Minghong  
National Project Director  
National Development and Reform Commission (NDRC)

April 12, 2010  
Date

45 Agreed by (United Nations Development Programme (UNDP))

  
Mr. Subinay Nandy  
Country Director  
UNDP China

13 APR 2010  
Date

50



## Inception Report

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### **BARRIER REMOVAL TO THE COST-EFFECTIVE DEVELOPMENT AND IMPLEMENTATION OF ENERGY EFFICIENCY STANDARDS AND LABELING PROJECT (BRESL)**

10

## China Activities

### **Brief Description:**

BRESL is aimed at rapidly accelerating the adoption and implementation of energy standards and labels (ES&L) in Asia, and in so doing brings about energy savings from the use of energy efficient appliances/equipment. The project also facilitates harmonization of test procedures, standards and labels among developing countries in Asia, when appropriate. The participating countries include China, Indonesia, Vietnam, Bangladesh, Pakistan, and Thailand. The project is expected to cost-effectively deliver an average 10% reduction in total residential and commercial energy use in partner countries at the time of peak impact by the year 2030 compared to a baseline scenario, thereby contributing to more environmentally sustainable and economically efficient development.

The project will focus largely on capacity building and assisting government, manufacturing, distributing, retail, consumer and environmental stakeholders throughout the Asian region to implement the most cost-effective energy efficiency measure available. In each participating country, priority activities will be carried out to help foster each country's preferred process for developing or expanding its ES&L program.

This project document presents the details of activities to be conducted in China, with China National Institution of Standardization (CNIS) as the implementing partner in close collaboration with the National Development and Reform Commission (NDRC) and China Standard Certification (CSC).

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## CHAPTER I INTRODUCTION

5 International experience has shown that ES&L programs have the potential to reduce the unit energy consumption of end-use equipment by as much as 30-50% within a time frame of five to ten years. These savings can be obtained through systematic application of a regime that includes product testing, energy labeling, and establishment of minimum energy performance standards for the most significant energy-using equipment in the home. These savings pay for themselves over time, and the efficient equipment has a lower life-cycle cost for consumers. Most Asian countries regard ES&L programs as cost-effective ways to realize their energy efficiency goals, since these provide substantial electricity peak demand reduction and energy savings with attractive cost/benefit ratios. Such programs have proven to be effective for mitigating climate change in all countries in which they have been implemented. These have the potential to affect complete market transformations for different classes of energy-saving products, at a cost far below the cost of providing new energy supply. However, there are several policy/regulatory; institutional; technical; information and awareness; market; and, financial barriers, that have persistently hindered the widespread development and application of ES&L programs in Asian countries.

20 The goal of the project is the reduction of GHG emissions in selected Asian countries (i.e. BRESL countries) by accelerating the adoption and implementation of energy standards and labels (ES&L) in Asia, and in so doing brings about energy savings from the use of energy efficient appliances/equipment. The project also facilitates harmonization of test procedures, standards and labels among developing countries in Asia, when appropriate. The participating countries include China, Indonesia, Vietnam, Bangladesh, Pakistan, and Thailand. The project is expected to cost-effectively deliver an average 10% reduction in total residential and commercial energy use in partner countries at the time of peak impact by the year 2030 compared to a baseline scenario, thereby contributing to more environmentally sustainable and economically efficient development.

30 BRESL will facilitate the transformation of the manufacture and sale of energy-efficient appliances and equipment through: 1) A regional initiative in Asia, with provision for general information, tools and training to all interested developing countries in the region plus customized efforts, all with a focus on regional cooperation; and, 2) National technical assistance to 6 developing countries in Asia.

40 The project will focus largely on capacity building and assisting government, manufacturing, distributing, retail, consumer and environmental stakeholders throughout the Asian region to implement the most cost-effective energy efficiency measure available. In each participating country, priority activities will be carried out to help foster each country's preferred process for developing or expanding its ES&L program.

45 This project document presents the details of BRESL activities to be conducted in China. The proposed project activities are grouped into the five major BRESL project components, and these are mainly complementary activities designed to remove barriers that have persistently hindered the widespread development and application of ES&L programs in China.

- 50 • ES&L Policy Making Program: Under this component, the following are the planned activities: (1) Revision of the *Regulation on Energy Efficiency Labeling Administration* to keep it in accordance with the new *China Energy Conservation Law* which was issued by the

Chinese Government and took effect in April 2008; (2) Monitoring and assessment of the applicability to China of the latest information of energy efficiency standards, labels, policies and best practices in the world particularly in typical western countries; (3) Conduct of study tours for relevant Chinese officials and researchers in the EU countries and the USA on the development and application of ES&L programs, policies and best practices; (4) Participation in major international events on ES&L organized and conducted by EE-related associations such as ACEEE, ECEEE, EEMODS and EEDAL; (5) Formulation of appropriate ES&L policy recommendations including the implementing rules and regulations, based on findings and lessons learned from the study tours and international conferences and fora for proposition to the government officials and policy decision makers.

• ES&L Capacity Building Program: This project component shall be comprised of the following activities: (1) Capacity building of local regulation enforcer of the implementation of energy efficiency standards and labels; (2) Capacity assessment of nationwide testing laboratories for energy efficiency; (3) Capacity building of nationwide energy efficiency testing laboratories based on the capacity need assessment; (4) Conduct of consistency or round robin testing of energy efficiency between third-party labs and ones in enterprises; (5) Development or revision of energy efficiency standards and implementing rules of various target products such as air conditioners, rice cookers, fluorescent lamp ballasts and electric motors; (6) Conduct market investigation on the energy efficiency performance of the target products, and evaluate the progress of ES&L implementation; (7) Continuously improve the data collection procedure.

• ES&L Manufacturer Support Program: This project component shall comprise of the following activities: (1) Conduct of a conference on updated energy efficiency standards and energy label implementation rules for target products, and evaluate the results and impacts of the conference; (2) Conduct of site visits to over 20 appliance manufacturing enterprises to evaluate their existing manufacturing processes and sort out their technical and policy needs in manufacturing EE products; (3) Provide suggestions and assistance to EE products manufactures in various aspects of EE products manufacturing including plan & design, complying with EE standards and labels, etc..

• ES&L Regional Cooperation Program: This project component is mainly on the BRESL regional activities to which China will be an active participant. The China Country Team members will participate in all regional activities. It will also support Chinese delegates that will be participating in the execution of the regional activities.

• ES&L Pilot Projects: This project component will involve the implementation of the following activities: (1) Development and maintenance of a widely available in-country database and website on energy-efficient products and their usage; (2) Development of a database for rice cookers and electric fans and updating databases for the other products; (3) Build the website of BRESL project, which will serve as the communication platform for BRESL countries and other Asian countries; (4) Conduct of feasibility evaluation on the ES&L harmonization of refrigerators, ballasts, electric motors, and electric rice cookers those are traded in the region, particularly between the BRESL countries; (5) Organize conferences on ES&L harmonization of refrigerators, ballasts, electric motors, and electric rice cookers; (6) Publicize the harmonized ES&L of refrigerators, ballasts, electric motors, and electric rice cookers, especially the testing protocols, to testing facilities.

## CHAPTER II PROJECT ACTIVITIES

5 The China National activities under the BRESL project are grouped according to the 5 BRESL  
project components: (1) ES&L Policy Making Program; (2) ES&L Capacity-Building Program;  
10 (3) ES&L Manufacturer Support Program; (4) ES&L Regional Cooperation Program; (5) ES&L  
Pilot Projects. The target products are refrigerators, air conditioners, electric fans, ballasts,  
electric motors, CFL, and electric rice cookers. The activities under each component and their  
respective outputs are described below:

### **Component 1: ES&L Policy Making Program**

15 To ensure the successful implementation of ES&L, a comprehensive set of enabling laws and  
regulations must be developed. On the one hand, China must accelerate the rate at which it  
improves its policies and regulations, so as to quickly solve problematic areas in existing  
20 regulations. On the other hand, China should participate in more international exchanges with the  
aim of learning best practices that can improve the current situation within the country and  
contribute toward a better legal framework on the implementation of national and regional ES&L  
programs.

#### **Activity 1.1: Revise China's Administration Regulation on Energy-Efficiency Labeling**

- Conduct of site visits, investigations and research to gather pertinent information and have a  
25 wider understanding of the current situation and prospects for EE standards and labeling.  
Such information/knowledge shall be used in the revision of the document *Administration  
Regulation on Energy-Efficiency Labeling*
- Convene experts and hold a workshop to draft *Administration Regulation on Energy-  
Efficiency Labeling*
- Hold a workshop to collect comments from a wide variety of enterprises and other  
30 stakeholders on the above draft
- Based on the above comments, complete the final version of Administration Regulation on  
Energy-Efficiency Labeling and submit it to designated ES&L government agencies for  
approval

35 **Output:** Approved revised document of *Administration Regulation on Energy-Efficiency  
Labeling*

**Projected impact:** Improved/enhanced legal framework for China's ES&L program and program  
40 implementation.

#### **Activity 1.2: Sharing of ES&L Implementation Experience**

- Monitoring and assessment of the applicability to China of the latest information of energy  
45 efficiency standards, labels, policies and best practices in the world particularly in western  
countries
- Conduct of study tours for relevant Chinese officials and researchers in the EU countries and  
the USA on the development and application of ES&L programs, policies and best practices
- Participation in major international events on ES&L organized and conducted by EE-related  
associations such as ACEEE, ECEEE, EEMODS and EEDAL
- Formulation of appropriate ES&L policy recommendations including the implementing  
50 rules and regulations, based on findings and lessons learned from the study tours and  
international conferences and fora for proposition to the pertinent government officials and

policy decision makers

**Output:**

- Attendance of Chinese representative at various conferences and events
- Assessment report on ES&L development in the world
- Policy recommendations for government agencies on ES&L

**Projected impact:**

- Increase NDRC, SAC, and other relevant agencies' awareness of global ES&L implementation status
- Strengthen communication and cooperation on ES&L with other developed countries
- Contribute to China's ES&L policy making

**Component 2: ES&L Capacity-Building Program**

This component addresses the issue of improving the technical know-how and improving the adequacy and competency of appliance testing facilities to measure and enforce ES&L compliance. The various activities are aimed at improving China's ability to carry out the testing and manufacturing of ES&L products, thereby working toward the goal of sustainable energy standards and labeling.

**Activity 2.1: Training for ES&L Local Enforcement Officials**

- Development of training materials for ES&L local enforcement officials on ES&L program development and implementation
- Conduct of training courses on ES&L program development and implementation in Sichuan, Shandong, Jiangsu, and Shanghai
- Evaluation of the results and impacts of the training courses. This will be carried out after each training (to assess the results and effectiveness of the training delivery), and a post-training evaluation 1 year before the end of the project (to assess the impacts of the training).

**Output:**

- *Training Guide for ES&L Local Enforcement Officials*
- Four completed training workshops for ES&L local enforcement officials
- Evaluation report on the training courses conducted (after each training)
  - Total attendance of 200 enforcement officials at training workshops
  - Media coverage and dissemination of training activities
- Post-training evaluation report (1 year after end of project) to assess the impacts of the training courses

**Projected impact:**

- Better enable relevant agencies and officials to carry out ES&L policies
- Expanded reach and awareness about ES&L among the local enforcement officials and appliance consumers
- Improved ES&L implementation effects in terms of improved supervision and inspection mechanism of China Energy Efficiency Labeling System (CEELS), increase in market share of EE products, increase in the number of local manufacturers producing EE products, and energy savings from the use of EE products

**Activity 2.2: Development/Revision of EE Standard and Label Implementation Rules**

**Activity 2.2.1: Develop China Energy Label Implementation Rule for Rice Cookers**

- Conduct of market research on the technologies and manufacturing best practices in the production of energy efficient rice cookers
- Drafting of the *China Energy Label Implementation Rule for Rice Cookers*
- Conduct of workshops to discuss the above draft
- 5 • Finalization of the draft *China Energy Label Implementation Rule for Rice Cookers* for submission to the relevant GOC agency for approval.

**Output:**

- Approved *China Energy Label Implementation Rule for Rice Cookers*

**Projected impact:**

- Enlargement of the implementation scope of *China Energy Efficiency Label*
- Enhanced public awareness of energy efficiency labeling
- Increased market share of EE rice cookers
- 15 • Energy savings in the use of EE rice cookers

**Activity 2.2.2: Revise Energy Efficiency Standard for fluorescent lamps**

- Conduct of market research on the technologies and manufacturing best practices in the production of energy efficient fluorescent lamps
- 20 • Revision of the existing *Energy Efficiency Standard for fluorescent lamps*
- Conduct of workshops to discuss the above revision
- Finalization of the revised *Energy Efficiency Standard for fluorescent lamps* for submission to and approval of the relevant GOC agency

**Output:**

- Approved revised *Energy Efficiency Standard for fluorescent lamps*

**Projected impact:**

- Improved EE standards for fluorescent lamps, and push for technological advancement toward energy saving in the use of such appliance
- 30 • Increased market share of EE fluorescent lamps

**Activity 2.2.3: Revise China Energy Label Implementation Rule for Air Conditioners**

- Revision of the existing *China Energy Label Implementation Rule for Air Conditioners*
- 35 • Conduct of workshops to discuss the proposed revision
- Finalization of the revised *China Energy Label Implementation Rule for Air Conditioners* for submission to and approval of the relevant GOC agency.

**Output:**

- 40 • Approved revised *China Energy Label Implementation Rule for Air Conditioners*

**Projected impact:**

- Enlargement of the implementation scope of *China Energy Efficiency Label*
- Enhanced public awareness of energy efficiency labeling
- 45 • Increased market share of EE air conditioners

**Activity 2.2.4: Revise Energy Efficiency Standard for Electric Motors**

- Conduct of market research on the technologies and manufacturing best practices in producing energy efficient electric motors
- 50 • Revision of the existing *Energy Efficiency Standard for Electric Motors*
- Conduct of workshops to discuss the proposed revisions

- Finalization of the revised *Energy Efficiency Standard for Electric Motors* for submission to and approval of the relevant GOC agency.

**Output:**

- 5
- Approved revised *Energy Efficiency Standard for Electric Motors*

**Projected impact:**

- 10
- Improved EE standards for electric motors, and push for technological advancement toward energy saving in the use of such equipment.
  - Increased market share of EE electric motors

**Activity 2.2.5: Revise Energy Efficiency Standard for Fluorescent Lamp Ballasts**

- 15
- Conduct of market research on the technologies and manufacturing best practices in the production of energy efficient fluorescent lamp ballasts
  - Revision of the existing *Energy Efficiency Standard for Fluorescent Lamp Ballasts*
  - Conduct of workshops to discuss the proposed revisions
  - Finalization of the revised *Energy Efficiency Standard for Fluorescent Lamp Ballasts* for submission to and approval of the relevant GOC agency.

20 **Output:**

- Approved revised *Energy Efficiency Standard for Fluorescent Lamp Ballasts*

**Projected impact:**

- 25
- Improved EE standards for Fluorescent Lamp Ballasts, and push for technological advancement toward energy saving in the use of such devices.
  - Increased market share of EE fluorescent lamp ballasts

**Activity 2.2.6: Develop China Energy Label Implementation Rule for Fluorescent Lamp Ballasts**

- 30
- Conduct of research on the development and implementation of EE labeling programs on fluorescent lamp ballasts in other countries
  - Drafting of a proposed *China Energy Label Implementation Rule for Fluorescent Lamp Ballasts*
  - Conduct of workshops to discuss the proposed EE label implementation rule
  - Finalization of the draft *China Energy Label Implementation Rule for Fluorescent Lamp Ballasts* for submission to and approval of the relevant GOC agency.
- 35

**Output:**

- 40
- Approved *China Energy Label Implementation Rule for Fluorescent Lamp Ballasts*

**Projected impact:**

- 45
- Enlargement of the implementation scope of *China Energy Efficiency Label*
  - Improved public awareness of energy efficiency labeling
  - Increased market share of EE fluorescent Lamp Ballasts

**Activity 2.3: Strengthening of National and Regional Testing and Certification Infrastructure**

**Activity 2.3.1: Onsite inspection of energy efficiency testing labs**

- 50
- Assess laboratory quality management systems
  - Conduct of onsite inspections of the capabilities of laboratories on energy efficiency testing



of appliances

- Assessment of the current capacities (e.g., technical, testing facilities) of existing energy efficiency testing laboratories
- Provision of technical advice to testing laboratories on the feasible and applicable improvements in the testing capacity and adequacy of testing facilities
- Preparation of the evaluation report describing the inspection findings, capacity assessments, and recommended improvements for testing laboratories

**Output:**

- Report of the onsite inspection findings

**Projected impact:**

- Standardized laboratory management systems and improved testing capabilities of energy efficiency testing laboratories
- Improved work and standards of energy efficiency laboratories.

**Activity 2.3.2: Round robin testing between various testing labs**

**Activity 2.3.2.1: Round Robin Testing for CFLs between Various Testing Labs**

- Preparation of CFL testing samples
- Hold workshop to develop energy efficiency testing procedures for CFL based on the existing procedures
- Selection of model laboratory for reference; conduct of EE test of CFL samples in reference laboratory
- Testing of CFL samples in various independent and private testing facilities
- Comparison and evaluation of findings from the round robin tests

**Output:**

- *CFL Energy Efficiency Testing Procedure*
- Round robin CFL testing results
- Round robin testing report (inclusive of test results, evaluation of test results, and recommendations)

**Projected impact:**

- Standardized CFL testing procedure
- Improved capacity of testing labs to test CFLs

**Activity 2.3.2.2: Round Robin Testing for Electric Motors between Various Testing Labs**

- Preparation of electric motor testing samples
- Development of energy efficiency testing procedure for electric motors
- Selection of model laboratory for reference; conduct of EE test of electric motor samples
- Testing of electric motor samples in various independent and private testing facilities.
- Comparison and evaluation of findings from the round robin tests

**Output:**

- *Energy Efficiency Testing Procedures for Electric Motors*
- Round robin electric motors testing results
- Round robin testing report (inclusive of test results, evaluation of test results, and recommendations)

**Projected impact:**

- Standardized electric motor testing procedures
- Improved capacity of testing labs to test EE electric motors

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**Activity 2.4: Progress Evaluation on Implementation Status of China Energy Label**

- Collection of data on energy efficiency of target products (refrigerators, air conditioners, electric motors, CFLs, and rice cookers)
- Development of a methodology for market investigation on the energy efficiency performance of the target products
- Conduct market research annually for refrigerators, air conditioners, electric motors, CFLs, and rice cookers
- Evaluation of the implementation status of the EE labeling system

10

**Output:**

- Market research reports on energy efficiency for the five target products
- Methodology for market investigation on the energy efficiency performance of the target products
- Energy performance benchmark for the target products

20

**Projected impact:**

- Provide data reference for setting standards and monitoring implementation and benefits of ES&L
- Improvement in the data collection and reporting procedures on energy performance of the target products
- Provide reference for ES&L related policy making

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**Component 3: ES&L Manufacturer Support Program**

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For a host of reasons such as distrust of standards and labels and increased costs of compliance, manufacturers are often reluctant to adopt new standards. As their cooperation is necessary toward ES&L efforts, this component aims to achieve technological, ideological, and financial alignment with private enterprises through meetings and workshops.

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**Activity 3.2: ES&L Publicizing Conference**

- Development of training materials on energy efficiency standards and labeling for room air conditioners and fluorescent lamp ballasts
- Conduct of a conference to educate and promote ES&L to manufacturers and retailers
- Evaluation of the results and impacts of the conference

40

**Output:**

- Educational and promotional materials on ES&L
- Evaluation report on the conference
  - Attendance of 100 companies at the conference
  - Coverage of activities through major media outlets
- Post-conference evaluation report (1 year after end of project) to assess the impacts of the promotional conference

45

**Projected impact:**

- Widespread knowledge and promotion of the revised energy standards and labels.

50

- Higher adoption rates of appropriate energy standards and labels by local appliance manufacturers and retailers.

**Activity 3.3: Onsite Inspection of Enterprises**

- 5 • Organization of local appliance company inspections by experts – this is for the evaluation of current manufacturing procedures and technologies employed.
- Discussions with the appliance manufacturers on their technological challenges and policy needs.
- 10 • Provide technical assistance to equipment manufactures in improving the efficiency of their products, or on their compliance to set EE standards/labels, or improving their manufacturing processes to enable the production of EE products, etc.
- Evaluation of the progress toward development of the existing “Alliance of Energy Efficient Labeling Enterprises”
- Evaluation of the potential applicable and feasible measures/techniques and technologies
- 15 • Organization and conduct of discussions between enterprises and local finance institutions on the financing of the manufacturing of energy saving products.

**Output:**

- Onsite inspection reports for around 20 local appliance manufacturing enterprises.
- 20 • Report on technological challenges and policy needs of high efficiency products.
- Administration Regulation of ‘Alliance of Energy Efficient Labeling Integrity Enterprises’
- Report on the technical assistance provided to each local appliance manufacturers
- Report on the proceedings (inclusive of findings, recommendations and proposed action plan) regarding the financing of EE product manufacturing.

**Projected impact:**

- Focuses attention on the technological, policy, and financial needs and challenges of private enterprises in their production of high-efficiency products
- Increased participation in Alliance of Energy Efficient Labeling Integrity Enterprises
- 30 • Increased capacity to locally produce EE standards-compliant appliances
- Increased production of EE products (refrigerators, air conditioners, electric motors, CFLs and rice cookers)

**Component 5: ES&L Pilot Projects**

35 Pilot projects grant individual countries flexibility to implement projects suited to their particular environments. China’s two main activities include the development and maintenance of the website and database of products with EEL. China will also take the lead in activities and conference on ES&L harmonization of refrigerators, ballasts, electric motors, and electric rice  
40 cookers:

**Activity 5.2: Maintenance of Database and Website of Products with EEL**

- Development of a databases for rice cookers and electric fans
- Updating of databases for the other products
- 45 • Daily maintenance of China’s Energy Efficiency Labeling Website

**Output:**

- Completed and updated database on EE rice cookers and electric fans
- ES&L-related reports, data, and EE standards and labeling programs information in website

**Project impact:**

- Strengthened data collection for, and management of the energy efficiency database
- Established firm foundation for regional ES&L program cooperation
- Expanded public reach and awareness of China's energy labeling website

5 **Activity 5.5: Organization and Conduct of the Conference on ES&L Harmonization of Refrigerators, Ballasts, Electric Motors, and Electric Rice Cookers**

**Activity 5.5.1: Organization and conduct of conferences on ES&L Harmonization of Refrigerators**

- 10
- Conduct of feasibility evaluation on the ES&L harmonization for refrigerators that are traded in the region, particularly between the BRESL countries
  - Organization and conduct of a conference on ES&L harmonization of refrigerators,
  - Publicize the harmonized ES&L of refrigerators, especially the testing protocols, to testing facilities in order to promote the adoptions of them

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**Output:**

- Feasibility evaluation report on ES&L harmonization of refrigerators

**Projected impact:**

- 20
- Promotion of the ES&L harmonization of refrigerators

**Activity 5.5.2: Organization and conduct of conferences on ES&L Harmonization of Ballasts**

- 25
- Conduct of feasibility evaluation on the ES&L harmonization for fluorescent lamp ballasts that are traded in the region, particularly between the BRESL countries
  - Organization and conduct of a conference on ES&L harmonization of ballasts
  - Publicize the harmonized ES&L of ballasts, especially the testing protocols, to testing facilities in order to promote the adoptions of them

30 **Output:**

- Feasibility evaluation report on ES&L harmonization of ballasts

**Projected impact:**

- 35
- Promotion of the ES&L harmonization of ballasts

**Activity 5.5.3: Organization and conduct of conferences on ES&L Harmonization of Electric Motors**

- 40
- Conduct of feasibility evaluation on the ES&L harmonization for electric motors that are traded in the region, particularly between the BRESL countries
  - Organization and conduct of a conference on ES&L harmonization of electric motors
  - Publicize the harmonized ES&L of electric motors, especially the testing protocols, to testing facilities in order to promote the adoptions of them

**Output:**

- 45
- Feasibility evaluation report on ES&L harmonization of electric motors

**Projected impact:**

- Promotion of the ES&L harmonization of electric motors

50 **Activity 5.5.4: Organization and conduct of conferences on ES&L Harmonization of Electric Rice Cookers**

- Conduct of feasibility evaluation on the ES&L harmonization for electric rice cookers that are traded in the region, particularly between the BRESL countries
  - Organization and conduct of a conference on ES&L harmonization of electric rice cookers
  - Publicize the harmonized ES&L of electric rice cookers, especially the testing protocols, to testing facilities in order to promote the adoptions of them
- 5

**Output:**

- Feasibility evaluation report on ES&L harmonization of electric rice cookers

10 **Projected impact:**

- Promotion of the ES&L harmonization of electric rice cookers

Project activities can be summarized as shown in Table 1 below.

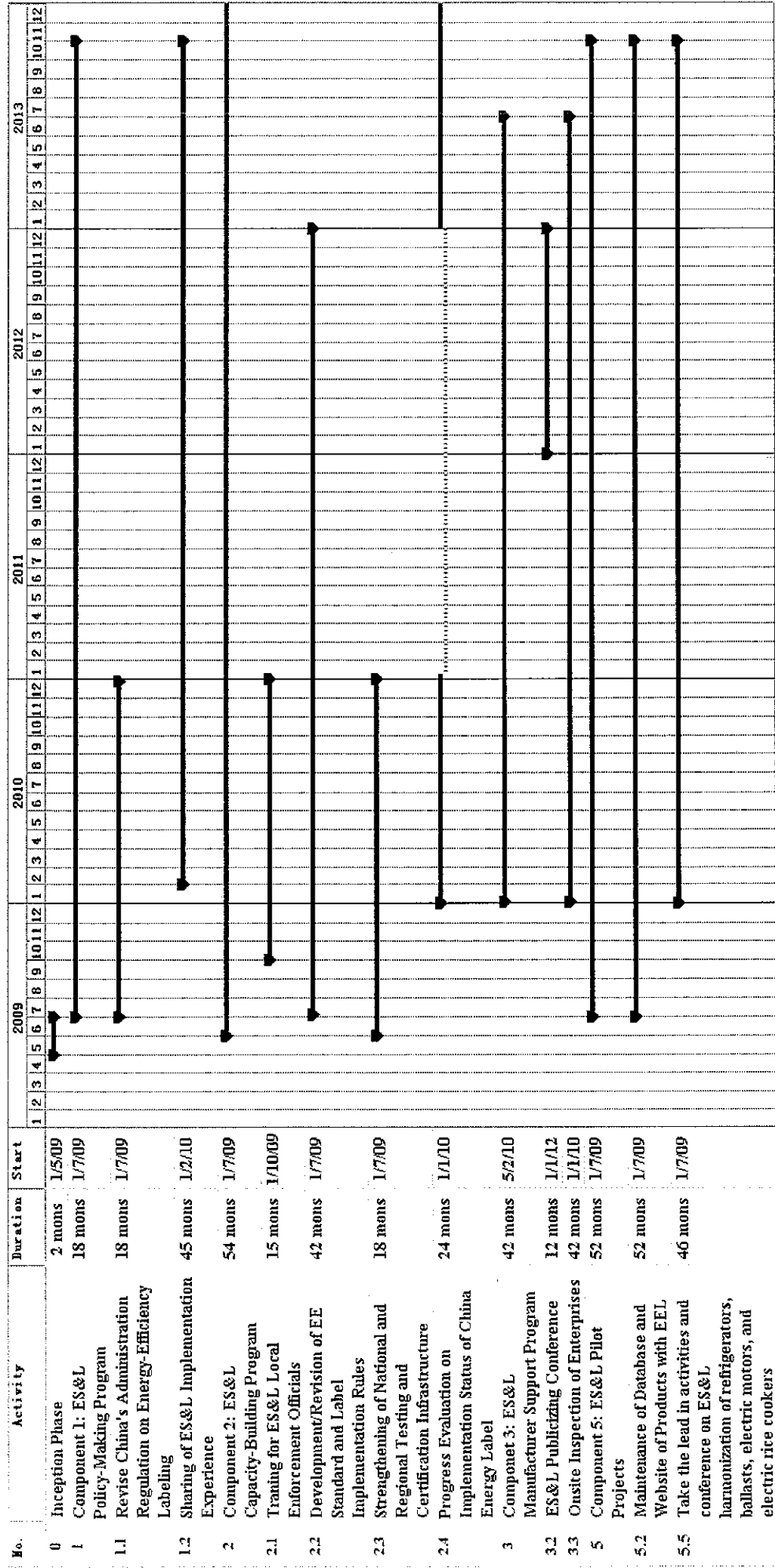
**TABLE 1: Summary of China's Participation in the Various Project Elements**

<b>Activity</b>	<b>PRC</b>
<b>Component 1: ES&amp;L Policy Making Program</b>	
1.1 Revise China's <i>Administration Regulation on Energy-Efficiency Labeling</i>	●
1.2: Sharing of ES&L Implementation Experience	●
<b>Component 2: ES&amp;L Capacity Building Program</b>	
2.1 Training for ES&L Local Enforcers	●
2.2 Development/Revision of EE Standard and Label Implementation Rules	●
2.2.1 Develop China Energy Label Implementation Rule for Rice Cookers	●
2.2.2 Revise Energy Efficiency Standard for fluorescent lamps	●
2.2.3 Revise China Energy Label Implementation Rule for Air Conditioners	●
2.2.4 Revise Energy Efficiency Standard for Electric Motors	●
2.2.5 Revise Energy Efficiency Standard for Fluorescent Lamp Ballasts	●
2.2.6 Develop China Energy Label Implementation Rule for Fluorescent Lamp Ballasts	●
2.3 Strengthening of National and Regional Testing and Certification Procedure	●
2.3.1 Onsite Inspection of Energy Efficiency Testing Labs	●
2.3.2 Consistency Comparison or Round Robin Testing Between Various Testing Labs	●
2.3.2.1: Consistency Comparison or Round Robin Testing for CFLs Between Various Testing Labs	●
2.3.2.2: Consistency Comparison or Round Robin Testing for Electric Motors Between Various Testing Labs	●
2.4 Progress Evaluation on Implementation Status of <i>China Energy Label</i>	●
<b>Component 3: ES&amp;L Manufacturer Support Program</b>	
3.2 ES&L Publicizing Conference	●
3.3 Onsite Inspection of Enterprises	●
<b>Component 5: ES&amp;L Pilot Projects</b>	
5.2 Maintenance of Database and Website of Energy-Efficient Equipment	●
5.5 Organization and Conduct of Conferences on ES&L Harmonization of Refrigerators, Ballasts, Electric Motors, and Electric Rice Cookers.	●
5.5.1: Organization and conduct of conferences on ES&L Harmonization of Refrigerators	●
5.5.2: Organization and conduct of conferences on ES&L Harmonization of Ballasts	●
5.5.3: Organization and conduct of conferences on ES&L Harmonization of Electric Motors	●
5.5.4: Organization and conduct of conferences on ES&L Harmonization of Electric Rice Cookers	●

**CHAPTER III  
PROJECT WORK PLAN**

This chapter provides work plan of the project throughout its 5-years duration, beginning in 2009 and ending in 2013, and detailed work plan of the first year (2009).

5 **Five Year Work Plan**



# First Year Work Plan

No.	Activity	Duration	Start	2009	3	4	5	6	7	8	9	10	11	12
0	Inception Phase Planning 5 Yr Work Plan, AWP, M&E Plan, Budget (5 yr, 1st yr)	2 mons 2 mons	1/5/09 1/5/09	[Timeline bars for 2009]										
1	Component 1: ES&L Policy-Making Program	18 mons	1/7/09	[Timeline bar from 7 to 12]										
1.1	Revise China's Administration Regulation on Energy-Efficiency Labeling	18 mons	1/7/09	[Timeline bar from 7 to 12]										
	Review the implementation status of China's Administration Regulation on Energy-Efficiency Labeling	2 mons	1/7/09	[Timeline bar from 7 to 8]										
	Site visit or interview ES&L stakeholders in China (Such as SAC, CNIS, AQSIQ, and so on)	3 mons	1/9/09	[Timeline bar from 7 to 9]										
	Prepare 1st draft revision of China's Administration Regulation on Energy-Efficiency Labeling	4 mons	1/12/09	[Timeline bar from 7 to 10]										
2	Component 2: ES&L Capacity-Building Program	54 mons	1/7/09	[Timeline bar from 7 to 12]										
2.1	Training for ES&L Local Enforcement Officials	15 mons	1/10/09	[Timeline bar from 7 to 11]										
	Develop training materials on ES&L enforcement for local enforcement officials	5 mons	1/10/09	[Timeline bar from 7 to 11]										
2.2	Development/Revision of EE Standard and Label Implementation Rules	42 mons	1/7/09	[Timeline bar from 7 to 12]										
2.2.1	Develop China Energy Label Implementation Rule for Rice Cookers	15 mons	2/7/09	[Timeline bar from 7 to 11]										
	Conduct market research on the technologies and efficiency of rice cookers	3 mons	2/7/09	[Timeline bar from 7 to 9]										
	Draft China Energy Label Implementation Rule for Rice Cookers	12 mons	1/10/09	[Timeline bar from 7 to 11]										
2.2.2	Revise Energy Efficiency Standard for Air Conditioners	27 mons	2/7/09	[Timeline bar from 7 to 12]										
	Conduct market research on the technologies and efficiency of air conditioners	3 mons	2/7/09	[Timeline bar from 7 to 9]										
	Revise Energy Efficiency Standard for Air Conditioners	24 mons	1/10/09	[Timeline bar from 7 to 11]										
2.3	Strengthening of National and Regional Testing and Certification Infrastructure	18 mons	1/7/09	[Timeline bar from 7 to 12]										
2.3.1	Onsite Inspection of Energy Efficiency Testing Labs	18 mons	1/7/09	[Timeline bar from 7 to 12]										



No.	Activity	Duration	Start	2009																				
				3	4	5	6	7	8	9	10	11	12											
2.3.2	Develop «General Rules for Onsite Inspection of EE Testing Labs», «Job Instructions for Onsite Inspection of EE Testing Labs», and other related documents and forms	2 mons	1/7/09																					
	Convene experts and make inspection schedules	1 mons	1/9/09																					
2.3.2.1	Validate quality management system documents and inspected EE testing capabilities of enterprises labs and those independent ones. Finish the reports of the onsite inspection findings	15 mons	1/10/09																					
	Consistency Comparison of Round Robin Testing Between Various Testing Labs	18 mons	1/7/09																					
2.3.2.1	Consistency Comparison of Round Robin Testing for CFLs Between Various Testing Labs	6 mons	1/7/09																					
	Prepare CFL testing samples	1 mons	1/7/09																					
2.3.2.1	Develop energy efficiency testing procedures for CFL	20 days	1/8/09																					
	Choose model laboratories for reference, and test energy efficiency of sample CFL	20 days	21/8/09																					
5	Test sample CFL in various independent and private testing facilities	3 mons	11/9/09																					
	Compare and evaluate findings	20 days	1/12/09																					
5.2	Component 5: ES&L Pilot Projects	52 mons	1/7/09																					
5.2	Maintenance of Database and Website of Products with EEL	52 mons	1/7/09																					

## CHAPTER IV LOGICAL FRAMEWORK ANALYSIS

Chapter IV presents logical framework analysis (LFA) of the project. The LFA includes project strategy, outputs, activities, indicators, targets, means of verification and critical assumptions, etc. LFA serves to ensure that the project is logically designed to achieve its stated goal and objective. It also serves as an evaluation tool for the implementation of each activity.

Project Strategy	Indicators	Baseline	Target	Means of Verification	Critical Assumptions
<p><b>GOAL:</b> Promotion of energy efficient product use, reduction of energy consumption and GHG emission, promote the application of energy-saving technologies in China</p> <p><b>OBJECTIVE:</b> Removal of barriers to the successful implementation of energy standards and labeling policies and programs in China</p>	<ul style="list-style-type: none"> <li>• Reduction of GHG emissions from thermal power generation by EOP, MMT/yr.</li> <li>• Reduction in the annual growth rate of GHG emissions from thermal power generation by EOP, %.</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• 2.24 Mt/yr in year 2013 (Calculation based on UNDP's BRESL baseline analysis sheet)</li> </ul>	<ul style="list-style-type: none"> <li>• Final Report in Year 5</li> </ul>	<ul style="list-style-type: none"> <li>• The sustainability of the support by key stakeholders in the participating countries;</li> <li>• Effective project coordination at the national and/or regional levels;</li> <li>• Failure of EE products to perform as claimed by manufacturers resulting to customer dissatisfaction</li> </ul>
	<ul style="list-style-type: none"> <li>• Reduction in total electricity use in the residential, commercial and industrial sectors by EOP, GWh/yr.</li> <li>• Market share of energy efficient appliances and equipment by EOP, %.</li> </ul>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• 2,048 GWh/yr in year 2013</li> <li>• 5-10</li> </ul>	<ul style="list-style-type: none"> <li>• Final Report in Year 5</li> </ul>	<ul style="list-style-type: none"> <li>• Continued political support by governments in China.</li> <li>• Interest of the policy-makers in EE remains at least at the current level.</li> <li>• Commitments for allocation of public budget for EE standards and labels increases.</li> <li>• Manufacturers open to new ideas on ways to improve their products.</li> </ul>

Outputs		Activities		Objectively Verifiable Indicators			Means of Gauging Success		Critical Assumptions	
				Indicators	Baseline	Target				
<b>Component 1: ES&amp;L Policy Making Program:</b> <b>OUTCOME: Enhancing China's ES&amp;L legal foundations, relevant agencies' awareness of global ES&amp;L, and China's technical capabilities of ES&amp;L</b>										
Output 1.1: Revise China's <i>Administration Regulation on Energy-Efficiency Labeling</i>	1.1.1 Site visit, investigate and research, and collaborate to draft the above-mentioned document <i>Administration Regulation on Energy-Efficiency Labeling</i> 1.1.2 Extensively comments collection for enterprises and other stakeholders 1.1.3 Submit draft revision of <i>Administration Regulation on Energy-Efficiency Labeling</i> to designated ES&L government agencies for approval	<ul style="list-style-type: none"> <li>Revised document of <i>Administration Regulation on Energy-Efficiency Labeling</i></li> </ul>	<ul style="list-style-type: none"> <li>1</li> </ul>	<ul style="list-style-type: none"> <li>revised</li> </ul>	<ul style="list-style-type: none"> <li>Official publication of revised document of <i>Administration on Energy-Efficiency Labeling</i></li> </ul>	<ul style="list-style-type: none"> <li>Continued political support by governments in China.</li> </ul>				
Output 1.2: Sharing of ES&L Implementation Experience	1.2.1 Monitoring and assessment of the applicability to China of the latest information of energy efficiency standards, labels, policies and best practices in the world particularly in western countries 1.2.2 Conduct of study tours for relevant Chinese officials and researchers in the EU countries and the USA on the development and application of ES&L programs, policies and best practices 1.2.3 Participation in major international events on ES&L organized and conducted by EE-related associations such as ACEEE, ECREE, EEMODS and EEDAL 1.2.4 Formulation of appropriate ES&L policy recommendations including the implementing rules and regulations, based on findings and lessons learned from the study tours and international conferences and fora for proposition to the pertinent	<ul style="list-style-type: none"> <li>Attendance of Chinese representative at various conferences and events</li> <li>Assessment report on ES&amp;L development in the world</li> <li>Policy recommendations for government agencies on ES&amp;L</li> </ul>	<ul style="list-style-type: none"> <li>0</li> <li>0</li> <li>0</li> </ul>	<ul style="list-style-type: none"> <li>4</li> <li>1</li> <li>1</li> </ul>	<ul style="list-style-type: none"> <li>Assessment report to NDRC</li> <li>Policy proposal to NDRC</li> </ul>	<ul style="list-style-type: none"> <li>Continued political support by governments in China</li> </ul>				

Outputs	Objectively Verifiable Indicators		Target	Means of Gauging Success		Critical Assumptions
	Activities	Indicators		Baseline	Indicators	
	government officials and policy decision makers					
<b>Component 2: ES&amp;L Capacity-Building Program</b>						
<b>OUTCOME: Improved institutional and individual capacity to implement ES&amp;L</b>						
Output 2.1: Training for ES&L Local Enforcers	2.1.1 Develop training materials for ES&L local enforcers 2.1.2 Hold trainings in Sichuan, Shandong, Jiangsu, and Shanghai	<ul style="list-style-type: none"> <li>• Training Guide for ES&amp;L Local Enforcers</li> <li>• Four training workshops for ES&amp;L local enforcers</li> <li>• 200 enforcers participated in the training workshops in total</li> <li>• Media coverage and dissemination of training activities</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> <li>• 0</li> <li>• 0</li> <li>• 0</li> </ul>	<ul style="list-style-type: none"> <li>• 1</li> <li>• 4</li> <li>• 200</li> <li>• 10</li> </ul>	<ul style="list-style-type: none"> <li>• Progress reports to NDRC</li> </ul>	<ul style="list-style-type: none"> <li>• The sustainability of the support by local enforcers in China</li> </ul>
Output 2.2: Development/Revision of EE Standards and Label Implementation Rules	2.2.1 Conduct market research on the technologies and efficiency of various products 2.2.2 Draft China Energy Label Implementation Rule for Rice Cookers 2.2.3 Revise Energy Efficiency Standard for Air Conditioners 2.2.4 Revise China Energy Label Implementation Rule for Air Conditioners 2.2.5 Revise Energy Efficiency Standard for electric motors 2.2.6 Revise Energy Efficiency Standard for Fluorescent Lamp Ballasts 2.2.7 Draft China Energy Label Implementation Rule for Fluorescent Lamp Ballasts 2.2.8 Hold workshops to discuss the drafts of energy efficiency standards and China Energy Label Implementation Rule for various products	<ul style="list-style-type: none"> <li>• Draft of China Energy Label Implementation Rule for Rice Cookers</li> <li>• Revision of Energy Efficiency Standard for Air Conditioners</li> <li>• Revision of China Energy Label Implementation Rule for Air Conditioners</li> <li>• Revision of Energy Efficiency Standard for Fluorescent Electric Motors</li> <li>• Revision of Energy Efficiency Standard for Fluorescent Lamp Ballasts</li> <li>• Draft of China Energy Label Implementation Rule for Fluorescent Lamp Ballasts</li> </ul>	<ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> <li>• 1</li> <li>• 1</li> <li>• 1</li> <li>• 0</li> </ul>	<ul style="list-style-type: none"> <li>• 1</li> <li>• revised</li> <li>• Revised</li> <li>• Revised</li> <li>• Revised</li> <li>• 1</li> </ul>	<ul style="list-style-type: none"> <li>• Official publications of the EE Standards and label implementation rules</li> </ul>	<ul style="list-style-type: none"> <li>• Continued political support by governments in China</li> </ul>

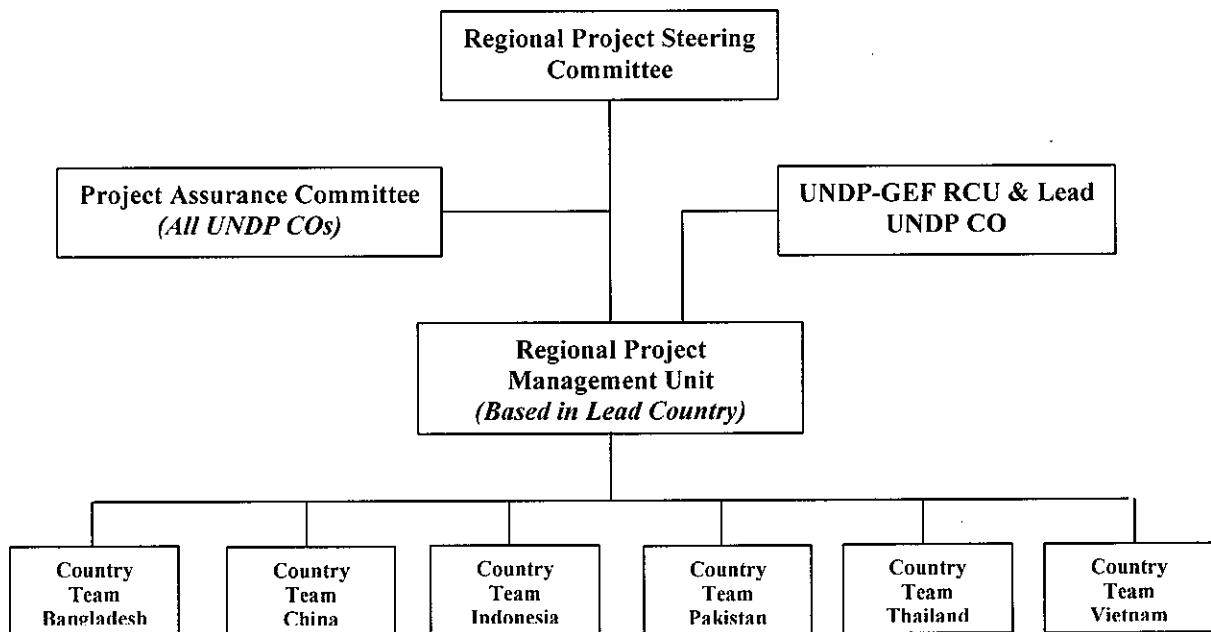
Outputs		Objectively Verifiable Indicators			Means of Gauging Success		Critical Assumptions	
Activities		Indicators	Baseline	Target				
Output 2.3.1: Onsite Inspection of Energy Efficiency Testing Labs	2.3a.1 Validate laboratory quality management system documents 2.3a.2 Onsite inspections of the capabilities of energy efficiency testing	<ul style="list-style-type: none"> <li>Report of the onsite inspection findings</li> </ul>	<ul style="list-style-type: none"> <li>0</li> </ul>	<ul style="list-style-type: none"> <li>1</li> </ul>	<ul style="list-style-type: none"> <li>Progress reports to NDRC</li> </ul>	<ul style="list-style-type: none"> <li>Commitments for allocation of public budget on product testing and certification increased.</li> <li>Sustained and increased interest of public officials and others in product testing and certification.</li> </ul>		
Output 2.3.2: Consistency Comparison or Round Robin Test For CFL and Electric Motors Between Various Testing Labs	2.3b.1 Prepare testing samples of CFL and electric motors. 2.3b.2 Develop energy efficiency testing procedures for CFL and electric motors. 2.3b.3 Choose model laboratories for reference, and test energy efficiency of CFL and electric motors samples. 2.3b.4 Test CFL and electric motors samples in various independent and private testing facilities. 2.3b.5 Compare and evaluate findings.	<ul style="list-style-type: none"> <li>Energy Efficiency Testing Procedures for CFL and electric motors samples</li> <li>Consistency evaluation of testing results findings for CFL and electric motors</li> </ul>	<ul style="list-style-type: none"> <li>0</li> <li>0</li> </ul>	<ul style="list-style-type: none"> <li>2</li> <li>2</li> </ul>	<ul style="list-style-type: none"> <li>Progress reports to NDRC</li> </ul>	<ul style="list-style-type: none"> <li>Commitments for allocation of public budget on product testing and certification increased.</li> <li>Sustained and increased interest of public officials and others involved in MIRAs on product testing and certification.</li> </ul>		
Output 2.4: Progress Evaluation on Implementation Status of China Energy Label	2.4.1 Energy Efficiency data collection for target products; methodology development for market investigation on energy efficiency 2.4.2 Conduct market research annually for refrigerators, air conditioners, electric motors, CFLs, and rice cookers; evaluate implementation status of labeling procedures	<ul style="list-style-type: none"> <li>Market research reports on energy efficiency for the five above-mentioned products</li> </ul>	<ul style="list-style-type: none"> <li>0</li> </ul>	<ul style="list-style-type: none"> <li>1 and to be updated in last year</li> </ul>	<ul style="list-style-type: none"> <li>Report on model of data collection and reporting procedures for China.</li> </ul>	<ul style="list-style-type: none"> <li>Country willing to collect data once shown importance of regular data collection to monitor implementation and aid ES&amp;L program refinements.</li> <li>Manufacturers willing to cooperate and provide data, as long as the task is not onerous.</li> </ul>		
<b>Component 3: ES&amp;L Manufacturer Support Program</b>								
<b>OUTCOME: Increased access to information and enhanced technical knowledge of local appliance/equipment manufacturers on the manufacture of EE products.</b>								
Output 3.2: ES&L Publicizing Conference	3.2.1 Develop training materials on energy efficiency standards and labeling for room air conditioners and ballasts 3.2.2 Hold conference to educate and promote ES&L to	<ul style="list-style-type: none"> <li>Education and promotion materials</li> <li>Attendance of 100 companies at the conference</li> <li>Coverage of activities</li> </ul>	<ul style="list-style-type: none"> <li>0</li> <li>0</li> <li>0</li> </ul>	<ul style="list-style-type: none"> <li>1</li> <li>100</li> <li>10</li> </ul>	<ul style="list-style-type: none"> <li>Documentation of publicizing activities</li> </ul>	<ul style="list-style-type: none"> <li>Manufacturers open to new ideas on ways to improve their products.</li> </ul>		

Outputs		Objectively Verifiable Indicators			Means of Gauging Success		Critical Assumptions	
Activities		Indicators		Baseline	Target			
	manufacturers and retailers in Year Four	through major media channels						
Output 3.3: Onsite Inspection of Enterprises	<p>3.3.1 Organize enterprise inspections by experts—evaluate procedures and technologies.</p> <p>3.3.2 Discuss with enterprises on their technological challenges and policy needs.</p> <p>3.3.3 Evaluate progress toward formation of “Alliance of Energy Efficient Labeling Enterprises”</p> <p>3.3.4 Organize discussions between enterprises and local finance institutions on financing of energy saving products.</p>	<ul style="list-style-type: none"> <li>Onsite inspections of around 20 enterprises.</li> <li>Report on technological challenges and policy needs of high efficiency products</li> <li>Administration Regulation of “Alliance of Energy Efficient Labeling Credit Enterprises”</li> </ul>	<ul style="list-style-type: none"> <li>0</li> <li>0</li> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>20</li> <li>1</li> <li>1</li> </ul>	<ul style="list-style-type: none"> <li>Documentation of onsite inspection</li> </ul>	<ul style="list-style-type: none"> <li>Other factors that also affect manufacturer attitudes align so that BRESL’s limited efforts produce an attitude shift.</li> </ul>		
<b>COMPONENT 5: ES&amp;L Pilot projects in China</b>								
<b>OUTCOME: Promote the regional ES&amp;L harmonization</b>								
Output 5.2: Maintenance of Database and Website of Products with EEL	<p>5.1.1 Develop databases for rice cookers and electric fans</p> <p>5.1.2 Update databases for the other products</p> <p>5.1.3 Daily maintenance of China’s Energy Efficient Labeling Website</p>	<ul style="list-style-type: none"> <li>Complete and updated database on products with EEL</li> </ul>		<ul style="list-style-type: none"> <li>Other targets are pending for RPMU</li> </ul>	<ul style="list-style-type: none"> <li>Updated database and necessary information platform</li> </ul>	<ul style="list-style-type: none"> <li>Manufacturers willing cooperate and provide data, as long as request not onerous.</li> </ul>		
Output 5.3: Take the Lead in Activities and Conference on ES&L Harmonization of Refrigerators, Ballasts, Electric motors, and Electric rice cookers.	<p>5.5.1 Take the lead in harmonization activities about ES&amp;L of refrigerators, ballasts, electric motors, and electric rice cookers.</p> <p>5.5.2 Hold a conference on ES&amp;L harmonization of refrigerators, ballasts, electric motors, and electric rice cookers.</p> <p>5.5.3 Support the capacity-building activities of other participating countries in developing and implementing ES&amp;L of refrigerators, ballasts,</p>	<ul style="list-style-type: none"> <li>Feasibility evaluation on ES&amp;L harmonization of refrigerators, ballasts, electric motors, and electric rice cookers</li> <li>Oversea capacity building training sessions provided by China</li> </ul>		<ul style="list-style-type: none"> <li>Progress reports to NDRC</li> </ul>	<ul style="list-style-type: none"> <li>Useful IA can be provided within a limited budget</li> <li>Related government support on the harmonization work and project activities</li> <li>Effective project coordination at the national and/or regional levels</li> </ul>			

Outputs	Activities	Objectively Verifiable Indicators			Target	Means of Gauging Success	Critical Assumptions
		Indicators	Baseline				
	electric motors, and electric rice cookers.						

## CHAPTER V MANAGEMENT ARRANGEMENTS

Given the past experience with UNDP-supported project, UNDP seeks to implement an innovative management approach based on a partnership where accountability and responsibility for managing and achieving project outputs are equally shared among the BRESL participating countries. The partnership will be based on strengthened management at the regional level and the national level. The BRESL consists of two levels activities: (i) enhancing the regional cooperation/ multi-recognize and sharing the best practices of energy efficiency standard and labeling (EESL), and (ii) developing and implementing country-specific strategies and activities for energy efficiency standard and labeling (EESL) to overcome the barriers of reducing the energy consumption within each national context. The organizational structure is shown as follows:



**BRESL Project Organizational Structure**

### **Regional Coordination and Implementation Arrangements**

The management structure of the BRESL project will mirror the aforementioned two-track approach, and will be at 2 levels. The first level will mainly be for the facilitation of regional cooperation. A Regional Project Steering Committee (RPSC) will be established and will comprise of the representatives of the UNDP-GEF RCU, UNDP China CO, Country Coordinator, NDRC, CSC Director, Regional Project Management Unit (RPMU) Director. The RPSC will play the role of an advisory committee. The RPSC member will also be invited to participate in the annual project review meetings. The Chairperson of the RPSC will be elected on a rotating basis among the participating countries. The RPMU will be also established to be responsible for coordinating and implementing the regional and national activities of the project. The RPMU Director will serve as the Secretary of the RPSC. BRESL will be Nationally-Executed (NEX) on behalf of the participating countries by China as the host country. It will assume the overall responsibility of ensuring that all activities are executed accordingly and as per the approved Project Document. The National Development and Reform Commission (NDRC) will be the Implementing Partner (or Executing Agency)



for the BRESL project while the China Standard Certification Center (CSC) is the Designated Implementing Partner (or Designated Implementing Agency).

5 The Regional Project Steering Committee (RPSC) will be established with the key responsibilities as follow: (a) Act as the main approving body for the execution of major decisions regarding the Project implementation and other related ES&L activities in the participating countries; (b) Endorse to the CTs the issuance of governments' ES&L policies and guidelines; (c) Decide on issues concerning delineation of thrusts and directions of the different on-going and pipeline ES&L projects; (d) Undertake yearly meetings to monitor and evaluate the progress of the BRESL Project; (e) Oversee and monitor the activities of all concerned government agencies involved in related ES&L projects development and adopt necessary measures to ensure that the said agencies shall fulfill their responsibilities; and (f) Recommend to the NDRC National Project Director any proposed policy and direction such as revision of the BRESL Project Document, legislative and executive matters, financial schemes, etc. As a minimum, the RPSC will meet at least once a year, allowing for the stakeholders to review the progress with the project implementation and to agree on a coordinated annual project implementation strategy and plan.

20 UNDP-China, together with the UNDP-GEF Regional Technical Advisor for Climate Change in the Asia-Pacific region will carry out the GEF oversight. Working in conjunction with the various project partners, UNDP-China will be responsible for monitoring and evaluation (M&E), including organizing project reviews, approving annual implementation work plans and budget revisions, monitoring progress, identifying problems, suggesting actions to improve project performance, facilitating timely delivery of project inputs, and provide linkages to the other sub-regional, Asia-Pacific regional and global initiatives. All M&E functions will be carried out in line with standard UNDP and UNDP-GEF procedures. UNDP China will also provide country office support for all the activities of the project as agreed with the implementation partner of China.

30 As the Implementing Partner for this regional project, China's NDRC will appoint a Regional Project Director (RPD) to be in charge of overall responsibilities, including planning, coordination, administration and financial management of the project with support by UNDP-China. The RPD will be responsible for the achievement of the project objectives, for all projects' reporting, including the submission of Annual Work Plans (AWP) and financial reports. He/She will ensure the delivery of the project outputs and the judicious use of the project resources. This will ensure that expected outputs are delivered using the most efficient and cost-effective implementation strategies and procedures. The RPD will be also a member of the BRESL RPSC. As the project's Implementing Partner, the NDRC will also provide in-kind contribution to implement the BRESL project.

40 As the Designated Implementing Partner for this regional project, the China Standard Certification Center (CSC) will take responsibility of supporting NDRC and UNDP-China in managing and implementing the BRESL project. The Director of CSC will be a member of the BRESL RPSC. At the same time, the director will also provide guidance to the RPMU Director to manage the project. The CSC will also provide the overall guidance and approval of all operational activities and will report to the Implementing Partner on achievement of project results.

50 A Regional Project Management Unit (RPMU) will be established by UNDP-China, together with the NDRC and CSC. The RPMU will be responsible for the day-to-day management of all the project activities including those on capacity building, demonstration sub-projects and dissemination activities both at the regional and national level. At the same

time, the RPMU will undertake some regional activities directly if needed. RPMU will be managed by a RPMU Director, who will be supported by three staff members.

5 A Project Assurance Committee (PAC) will be established with the main responsibility of monitoring the project implementation process and achievements. The Energy Focal Points of UNDP Country Offices (UNDP-COs) in the BRESL countries will be members of the PAC. They will also be called upon periodically to contribute inputs on the relevance of BRESL activities to the on-going and planned national level energy efficiency and related initiatives. Each PAC member will be responsible for the coordination of project activities and activities of the organizations he/she represents to avoid duplication of effort. On request 10 from the RPMU, the PAC will provide guidance on the execution of project activities.

Relevant regional activities will be subcontracted to, and executed by appropriate regional organizations with the expertise and time on mutually agreed terms. Regional organizations, 15 which have the comparative advantage vis-à-vis the relevant regional activities, will be designated as the sub-contractor for those activities. One mechanism to determine such possible comparative advantages is procurement via Open International Competition or Limited International Competition, as per UNDP Results Management User Guide.

## 20 **National Coordination and Implementation Arrangements**

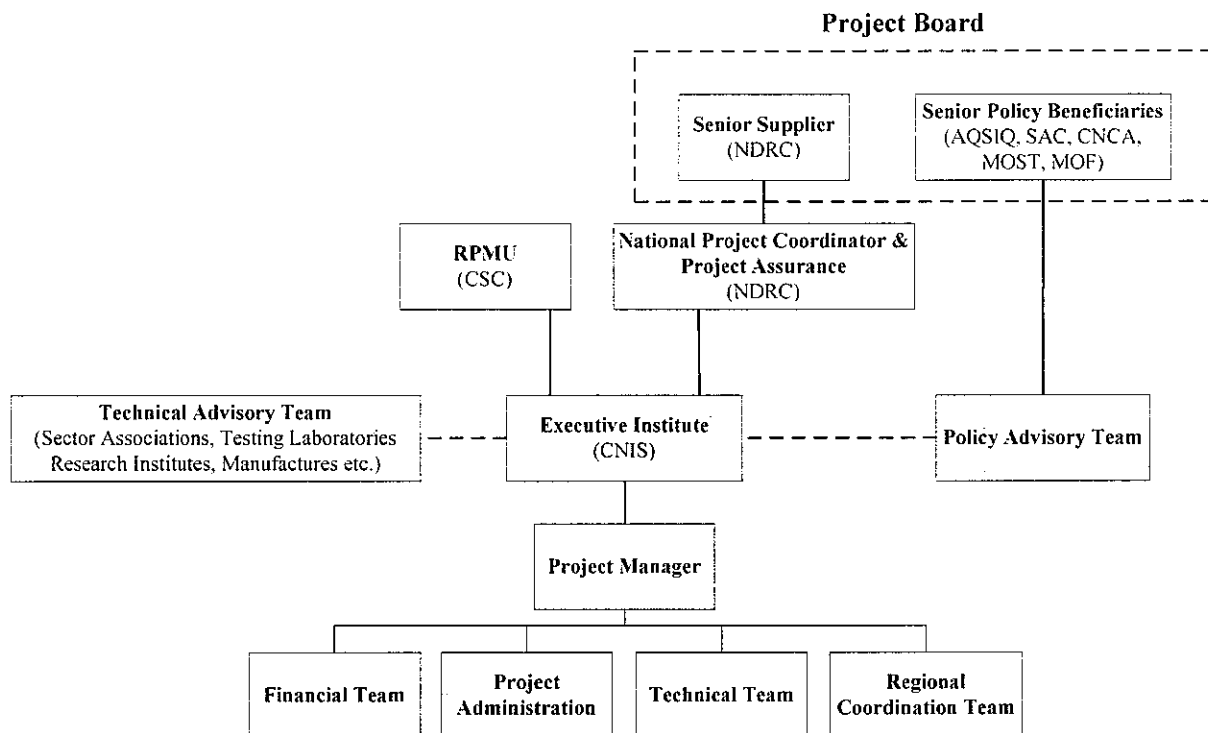
The second level will mainly be on the implementation of the Country Teams (CTs) in each BRESL country. The CTs, made up of representatives from government, the private sector and civil society including NGOs will ensure that the national activities are carried out in 25 coordination with all the parallel activities. Each CT will provide support as per agreed work plan to the BRESL implementation at the regional level to ensure the maximum outputs and achievement of the project. Each country will decide on the most appropriate person to chair the CT. Each CT will appoint their own national experts, as needed, in accordance with the agreed national activities to be carried out under the BRESL project. Each country will 30 appoint a National Project Coordinator (NPC) who will work full time on the project and paid from its country budget. The NPC will also be responsible for the day-to-day management and implementation of all national project activities.

In each BRESL country, the national level activities that were identified and defined by the 35 country will be implemented by its CT. These are activities that address specific barriers to ES&L at the national level, delivering on-the-ground activities including appliance and/or equipment testing utilizing local experts and involving entities working on ES&L, as well as those that will contribute to the regional ES&L harmonization efforts. This is to ensure maximum impacts and visibility. It will also give country's ownership of the project, 40 maximum local participation, particularly of the private sector, NGOs and local authorities, and more importantly the consumers. CTs may subcontract certain activities to regional and international experts where necessary.

National government professionals and other relevant national stakeholders from the private 45 sector and civil society will, to the extent possible, manage, coordinate and implement the in-country activities. The CTs will upon request of the RPMU and as per agreed work plans be provided with external technical assistance for implementation of specific in-country activities. Relevant regional organizations, national consultants, regional consultants or international consultants can provide such needed expertise to the RPMU as needed.

50

## China's Country Team (CT) Management Structure



Note: NDRC = National Development and Reform Commission  
 5 AQSIQ = General Administration of Quality Supervision, Inspection and Quarantine  
 SAC = Standardization Administration of China  
 CNCA = Certification and Accreditation Administration of China  
 MOST = Ministry of Science and Technology  
 MOF = Ministry of Finance  
 10 CNIS = China National Institute of Standardization

**The Project Board** is the group responsible for making by consensus, management decisions for a project when guidance is required by the Project Manager, including recommendation for UNDP/Implementing Partner approval of project plans and revisions. In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance to standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case a consensus cannot be reached within the Board, final decision shall rest with the NDRC. In addition, the Project Board plays a critical role in UNDP commissioned project evaluations by quality assuring the evaluation process and products, and using evaluations for performance improvement, accountability and learning. Project reviews by this group are made at designated decision points during the running of the project, or as necessary when raised by the Project Manager. This group is consulted by the Project Manager for decisions when Project Manager's tolerances (normally in terms of time and budget) have been exceeded (flexibility). Based on the approved annual work plan (AWP), the Project Board may review and approve project quarterly plans when required and authorizes any major deviation from these agreed quarterly plans. It is the authority that signs off the completion of each quarterly plan as well as authorizes the start of the next quarterly plan. It ensures that required resources are committed and arbitrates on any conflicts within the project or negotiates a solution to any problems between the projects and external bodies. In addition, it approves the appointment and responsibilities of the Project Manager and any delegation of its Project Assurance responsibilities.

The Project Board consists of three roles: (1) an Executive: individuals representing the project ownership to chair the group; (2) Senior Supplier: individual or group representing the implementing partner who is the main party responsible for project execution. (3) Senior Policy Beneficiary: individual or group of individuals representing the interests of those policy-makers who will ultimately benefit from the project. The Senior Policy Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries.

**Project Assurance** is the responsibility of NDRC. The project assurance role supports the Project Board by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed. Project Assurance has to be independent of the Project Manager; therefore, the Project Board cannot delegate any of its assurance responsibilities to the Project Manager. The Programme Manager assigned by NDRC holds this role.

**National Project Coordinator:** The Project Coordinator has the authority to supervise the management of the project on behalf of the Implementing Partner within the constraints laid down by the Board. The Project Coordinator's prime responsibility is to ensure that the project produces the results (outputs) specified in the project document, to the required standard of quality and within the specified constraints of time and cost.

**Project Manager:** The Project Manager has the authority to run the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Board. The Project Manager is responsible for day-to-day management and decision-making for the project. The Project Manager's prime responsibility is to ensure that the project produces the results (outputs) specified in the project document, to the required standard of quality and within the specified constraints of time and cost.

**Policy/Technical Advisory Teams** appointed by the Project Board to help the Project manager and Project Technical Teams on providing policy and technical support as required by the needs of project tasks. Each Advisory Team will work on specific issue, as assigned by the Project Board.

**The Project Support role** provides project administration, management, technical support and regional coordination to the Project Manager as required by the needs of the individual project or Project Manager. It is necessary to keep Project Support and Project Assurance roles separate in order to maintain the independence of Project Assurance.

## CHAPTER VI PROJECT BUDGET

- 5 This chapter depicts project budget in matrix. It presents summary cost of China's contribution (co-financing) by project component and management, and the budget for project implementation in China by project activity and year of implementation.

### Summary Cost of Each BRESL Project Component (US\$)

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Project Component	Baseline	Incremental	Total Cost	%
1. ES&L Policy Making Program	7,245,700	1,611,400	8,857,100	24.7
2. ES&L Capacity Building Program	9,057,900	2,607,500	11,665,400	32.5
3. ES&L Manufacturer Support Program	5,273,200	791,400	6,064,600	16.9
4. ES&L Regional Cooperation Program	3,240,700	710,900	3,951,600	11.0
5. ES&L Pilot Projects	2,026,600	1,298,800	3,325,400	9.3
Project Management Unit Support	1,236,800	780,000	2,016,800	5.6
<i>of which Monitoring and Evaluation</i>	0	75,000	0	
<b>Total</b>	<b>28,080,900</b>	<b>7,800,000</b>	<b>35,880,900</b>	<b>100</b>

### China's Contribution to BRESL Project, by Project Component and Management (US\$)

Organization	Project Components					Project Mgm't	Total
	1	2	3	4	5		
<b>GEF-RAF(1)</b>	78,000	1,052,500	168,750	122,000	328,750	250,000	<b>2,000,000</b>
<b>Co-Financing(2)</b>	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	0	<b>11,000,000</b>
<b>Total (1+2)</b>	<b>2,278,000</b>	<b>3,252,500</b>	<b>2,368,750</b>	<b>2,322,000</b>	<b>2,528,750</b>	<b>250,000</b>	<b>13,000,000</b>

- 15 The China co-financing budget (baseline) is US\$ 11,000,000. The largest portion is US\$ 10,068,000 for analysis and research, equipment, training for test laboratories for six products, etc.. US\$ 932,000 is for in-kind contribution for the project management, management office, staff, etc.

## China BRESL Project Budget

Activity	Agency	Source	Code	Description	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Component 1: ES&L Policy-Making Program										
Activity 1.1: Revise China's Administration Regulation on Energy-Efficiency Labeling										
CNIS	GEF	71300		National experts	9,000	10,000	0	0	0	
CNIS	GEF	71600		Travel	600	1,000	0	0	0	
CNIS	GEF	75700		Meetings and workshops (including lunches, dinners, banquets, room rent, coffee break, projectors, microphones, background boards, etc.)	2,500	3,500	0	0	0	
CNIS	GEF	74500		Miscellaneous Expenses	500	900	0	0	0	
					12,600	15,400	0	0	0	28,000
Activity 1.2: Sharing of ES&L Implementation Experience										
CNIS	GEF	71300		National experts	0	2,500	2,500	2,500	2,500	
CNIS	GEF	71600		Travel	0	6,250	6,250	6,250	6,250	
CNIS	GEF	75700		Meetings and workshops (including lunches, dinners, banquets, room rent, coffee break, projectors, microphones, background boards, etc.)	0	3,750	3,750	3,750	3,750	
					0	12,500	12,500	12,500	12,500	50,000
				<b>Component 1 Total</b>	<b>12,600</b>	<b>27,900</b>	<b>12,500</b>	<b>12,500</b>	<b>12,500</b>	<b>78,000</b>
Component 2: ES&L Capacity-Building Program										
Activity 2.1: Training for ES&L Local Enforcement Officials										
CNIS	GEF	71300		National experts	17,000	44,000	0	0	0	
CNIS	GEF	71600		In-region travel	3,000	7,000	0	0	0	
CNIS	GEF	75700		Meetings and workshops (including lunches, dinners, banquets, room rent, coffee break, projectors, microphones, background boards, etc.)	6,000	14,000	0	0	0	
					26,000	65,000	0	0	0	91,000

Activity 2.2: Development/Revision of EE Standard and Label Implementation Rules  
 Activity 2.2.1 Develop China Energy Label Implementation Rule for Rice Cookers

CNIS	GEF	71600	In-region travel	1,200	1,500	0	0	0	
CNIS	GEF	71300	National experts	10,000	12,000	0	0	0	
CNIS	GEF	75700	Meetings and workshops (including lunches, dinners, banquets, room rent, coffee break, projectors, microphones, background boards, etc.)	2,000	2,800	0	0	0	
				13,200	16,300	0	0	0	29,500

Activity 2.2.2 Revise Energy Efficiency Standard for Air Conditioners

CNIS	GEF	71600	In-region travel	1,500	3,500	3,500	0	0	
CNIS	GEF	71300	National experts	10,000	35,000	21,000	0	0	
CNIS	GEF	75700	Meetings and workshops (including lunches, dinners, banquets, room rent, coffee break, projectors, microphones, background boards, etc.)	4,000	8,000	6,000	0	0	
				15,500	46,500	30,500	0	0	92,500

Activity 2.2.3 Revise China Energy Label Implementation Rule for Air Conditioners

CNIS	GEF	71600	In-region travel	0	0	800	2,000	0	
CNIS	GEF	71300	National experts	0	0	6,000	15,000	0	
CNIS	GEF	75700	Meetings and workshops (including lunches, dinners, banquets, room rent, coffee break, projectors, microphones, background boards, etc.)	0	0	1,200	2,900	0	
				0	0	8,000	19,900	0	27,900

Activity 2.2.4 Revise Energy Efficiency Standard for Electric Motors

CNIS	GEF	71600	In-region travel	0	3,600	3,600	0	0	
CNIS	GEF	71300	National experts	0	34,500	34,500	0	0	
CNIS	GEF	75700	Meetings and workshops (including lunches, dinners, banquets, room rent, coffee break, projectors, microphones, background boards, etc.)	0	8,500	8,500	0	0	
				0	46,600	46,600	0	0	93,200

Activity 2.2.5 Revise Energy Efficiency Standard for Fluorescent Lamp Ballasts

CNIS	GEF	71600	In-region travel	0	4,000	0	0	0	
CNIS	GEF	71300	National experts	0	35,000	0	0	0	
CNIS	GEF	75700	Meetings and workshops (including lunches, dinners, banquets, room rent, coffee break, projectors, microphones, background boards, etc.)	0	8,500	0	0	0	
				0	47,500	0	0	0	92,000

Activity 2.2.6 Develop China Energy Label Implementation Rule for Fluorescent Lamp Ballasts

CNIS	GEF	71600	In-region travel	0	0	2,800	0	0	
CNIS	GEF	71300	National experts	0	0	20,500	0	0	
CNIS	GEF	75700	Meetings and workshops (including lunches, dinners, banquets, room rent, coffee break, projectors, microphones, background boards, etc.)	0	0	5,100	0	0	
				0	0	28,400	0	0	28,400

Activity 2.3: Strengthening of National and Regional Testing and Certification Infrastructure

Activity 2.3.1: Onsite Inspection of Energy Efficiency Testing Labs

CNIS	GEF	71300	National experts	30,000	36,500	0	0	0	
CNIS	GEF	71600	Travel	15,000	10,000	0	0	0	
				45,000	46,500	0	0	0	91,500

Activity 2.3.2: Consistency Comparison or Round Robin Testing Between Various Testing Labs

Activity 2.3.2.1: Consistency Comparison or Round Robin Testing for CFLs Between Various Testing Labs

CNIS	GEF	71300	National experts	48,500	0	0	0	0	
CNIS	GEF	71600	Travel	5,000	0	0	0	0	
CNIS	GEF	75700	Meetings and workshops (including lunches, dinners, banquets, room rent, coffee break, projectors, microphones, background boards, etc.)	1,500	0	0	0	0	
CNIS	GEF	74500	Miscellaneous expenses (including samples and testing expenses)	25,000	0	0	0	0	
				80,000	0	0	0	0	80,000

Activity 2.3.2.2: Consistency Comparison or Round Robin Testing for Electric Motors Between Various Testing Labs



CNIS	GEF	71300	National experts	0	48,500	0	0	0	
CNIS	GEF	71600	Travel	0	5,000	0	0	0	
CNIS	GEF	75700	Meetings and workshops (including lunches, dinners, banquets, room rent, coffee break, projectors, microphones, background boards, etc.)	0	1,500	0	0	0	
CNIS	GEF	74500	Miscellaneous expenses (including samples and testing expenses)	0	25,500	0	0	0	
				0	80,500	0	0	0	80,500
Activity 2.4: Progress Evaluation on Implementation Status of China Energy Label									
CNIS	GEF	71300	National experts	0	30,000	0	0	0	32,000
CNIS	GEF	75700	Meetings and workshops (including lunches, dinners, banquets, room rent, coffee break, projectors, microphones, background boards, etc.)	0	6,000	0	0	0	7,000
CNIS	GEF	72100	Subscriptions (Database)	0	6,000	0	0	0	6,000
				0	42,000	0	0	0	45,000
<b>Component 2 Total</b>				<b>179,700</b>	<b>390,900</b>	<b>129,600</b>	<b>48,300</b>	<b>45,000</b>	<b>793,500</b>

Component 3: ES&L Manufacturer Support Program									
Activity 3.2: ES&L Publicizing Conference									
CNIS	GEF	71300	National experts	0	0	0	12,000	0	
CNIS	GEF	71600	Travel	0	0	0	2,000	0	
CNIS	GEF	75700	Meetings and workshops (including lunches, dinners, banquets, room rent, coffee break, projectors, microphones, background boards, etc.)	0	0	0	15,150	0	
				0	0	0	29,150	0	29,150
Activity 3.3: Onsite Inspection of Enterprises									
CNIS	GEF	71300	National experts	0	13,500	13,500	13,000	12,400	
CNIS	GEF	71600	Travel	0	5,100	5,000	4,000	4,100	
				0	18,600	18,500	17,000	16,500	70,600
<b>Component 3 Total</b>				<b>0</b>	<b>18,600</b>	<b>18,500</b>	<b>46,150</b>	<b>16,500</b>	<b>99,750</b>

Component 5: ES&L Pilot Projects

Activity 5.2: Maintenance of Database and Website of Products with EEL

CNIS	GEF	71300	National experts	8,000	15,000	15,000	15,000	15,000	
				8,000	15,000	15,000	15,000	15,000	68,000

Activity 5.5: Take the Lead in Activities and Conference on ES&L Harmonization of Refrigerators, Ballasts, Electric motors, and Electric Rice Cookers

Activity 5.5.1: Take the Lead in Activities and Conference on ES&L Harmonization of Refrigerators									
CNIS	GEF	71300	National experts	0	6,840	6,850	8,100	8,100	
CNIS	GEF	71200	International experts	0	2,950	2,930	2,950	2,950	
CNIS	GEF	71600	Travel	0	3,100	3,150	3,200	3,200	
Harmonization Pilots & Workshops									
CNIS	GEF	75700	(including lunches, dinners, banquets, room rent, coffee break, projectors, microphones, background boards, etc.)	0	11,800	0	0	0	
CNIS	GEF	74100	Documentation (development & print)	0	780	400	400	800	
				0	25,470	13,330	14,650	15,050	68,500

Activity 5.5.2: Take the Lead in Activities and Conference on ES&L Harmonization of Ballasts

CNIS	GEF	71300	National experts	0	7,150	7,150	7,150	7,150	
CNIS	GEF	71200	International experts	0	2,100	2,100	2,100	2,100	
CNIS	GEF	71600	Travel	0	2,900	2,900	2,900	2,900	
Harmonization Pilots & Workshops									
CNIS	GEF	75700	(including lunches, dinners, banquets, room rent, coffee break, projectors, microphones, background boards, etc.)	0	12,000	0	0	0	
CNIS	GEF	74100	Documentation (development & print)	0	750	750	750	750	
				0	24,900	12,900	12,900	12,900	63,600

Activity 5.5.3: Take the Lead in Activities and Conference on ES&L Harmonization of Electric Motors

CNIS	GEF	71300	National experts	0	7,800	7,800	7,800	8,000	
CNIS	GEF	71200	International experts	0	2,100	2,200	2,200	2,800	
CNIS	GEF	71600	Travel	0	3,150	3,150	3,150	3,150	
Harmonization Pilots & Workshops									
CNIS	GEF	75700	(including lunches, dinners, banquets, room rent, coffee break, projectors, microphones, background boards, etc.)	0	12,500	0	0	0	

CNIS	GEF	74100	Documentation (development & print)	0	950	500	500	850	2,800
Activity 5.5.4: Take the Lead in Activities and Conference on ES&L Harmonization of Electric Rice Cookers									
CNIS	GEF	71300	National experts	0	6,800	6,800	6,800	7,000	27,400
CNIS	GEF	71200	International experts	0	2,100	2,100	2,100	2,500	8,800
CNIS	GEF	71600	Travel	0	2,900	2,900	2,900	2,900	11,600
Harmonization Pilots & Workshops (including lunches, dinners, banquets, room rent, coffee break, projectors, microphones, background boards, etc.)									
CNIS	GEF	75700		0	10,100	0	0	0	10,100
CNIS	GEF	74100	Documentation (development & print)	0	800	450	450	450	2,150
				0	22,700	12,250	12,250	12,850	60,050
<b>Component 5 Total</b>				<b>8,000</b>	<b>114,570</b>	<b>67,130</b>	<b>68,450</b>	<b>70,600</b>	<b>328,750</b>

**OVERALL Total (all components)** 200,300 551,970 227,730 175,400 144,600 1,300,000

**Contribution to Regional Activities**

Component 2 259,000

Component 3 69,000

Component 4 122,000

Contribution to PMO Costs 450,000

**GRAND TOTAL** 2,000,000

## CHAPTER VII PROJECT RISKS AND ASSUMPTIONS

5 While all efforts are made to ensure the effective design and implementation of the project activities, there are some risks that have to be addressed to ensure success of the project. The principal risks, which can potentially hinder the successful project implementation and/or reduce project effectiveness, relate to: (a) the sustainability of the support by key stakeholders in the participating countries; (b) lack of, or fading, interest of the private sector (particularly appliance/equipment manufacturers and suppliers); (c) ineffective project coordination at the national and/or regional levels; (d) failure of EE products to perform as claimed by manufacturers resulting to customer dissatisfaction; (e) unabated proliferation of illegally traded and unreliable EE equipment/appliances; and, (f) unwillingness of consumers to buy EE products due to bad experiences in the past and high initial cost may lead to failure of the project to induce increased sales and widespread use of EE equipment and appliances.

15 To address these risks, the project has to establish effective means to monitor and to the extent possible mitigate these risks. Mitigation measures include a strong emphasis on hands-on project management and participation of each country, mobilizing private sector participation and a continuous dialogue between the project's donors, implementing Partner, executing agency, regional organizations and national governments. The different risks that were identified during the BRESL project formulation exercise and the recommended mitigation measures are the following:

25 **TABLE 2: Summary of Risk Mitigation Measures for the BRESL Project**

Risk	Level of Risk	Mitigating Actions
<p><b>Ineffective regional coordination and collaboration with regional organizations</b> Participating countries may continue to carry out ES&amp;L activities on their own, losing the potentials for synergetic work towards wider achievement of ES&amp;L harmonization objectives.</p>	Low	<ul style="list-style-type: none"> <li>• Regular meetings of the Regional PSC to exchange work programmes and implementation plans.</li> <li>• Prepare meeting plans in advance to ensure participation of participating countries.</li> </ul>
<p><b>Lack of cooperation by the private sector</b> Private sector not participating adequately in the project due to the economic slump, private enterprises may be reluctant to invest in EE products.</p>	Moderate	<ul style="list-style-type: none"> <li>• Promote EE products among consumers, especially when cost of energy is of their concern at present.</li> </ul>
<p><b>EE Technology Risk</b></p> <ul style="list-style-type: none"> <li>• Failure of EE products (equipment and appliances) to perform as claimed by manufacturers resulting to customer dissatisfaction.</li> <li>• Proliferation of illegally traded and unreliable EE products.</li> </ul>	Moderate	<ul style="list-style-type: none"> <li>• Serious implementation of EE standards, labeling and warranty requirements by EEI and TISI.</li> <li>• Consumer education activities focus on use and application of wide range of EE products as well as consumer protection programs of the government (EGAT).</li> </ul>

Risk	Level of Risk	Mitigating Actions
<b>Government procurement - China</b> Government may not adopt EE products by the end of this project duration.	Low	<ul style="list-style-type: none"> <li>• Already invited PCD, who is in charge of green procurement to join the project's senior beneficiaries.</li> </ul>
<b>OVERALL</b>	<b>Moderate</b>	

Based on enquiries from stakeholders made through the BRESL Survey, the overall project risk is moderate. BRESL is designed to facilitate close coordination and consultation of the relevant stakeholders in each participating country in each of the proposed activities. Activities that provide policies, product standards, guidelines and incentives, tools and procedures to implement ES&L programs, information and education are sufficient to ensure mitigation of the risks. Government agencies (particularly those with the ES&L mandate), their partners and a number of regional organizations have committed to financially support the project and use part of their budget in the next 5 years for BRESL.

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At the inception stage of BRESL the project risks and assumptions will be reviewed, and where necessary additional project risks will be identified. In addition, also as part of the project inception activities, a detailed risk management strategy for project implementation will be prepared.

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## CHAPTER VIII MONITORING AND EVALUATION PLAN

5 Project monitoring, evaluation and dissemination will be undertaken in accordance with UNDP and GEF established procedures. The executing agency will be required to prepare Quarterly Project Reports (QPR) and combined Annual Project Reports and Project Implementation Review reports (APR/PIR) to UNDP. The QPR will provide the summary of the project results, progress and variances from the original plan, implementation issues, and steps being taken to address these issues, and work plans for the next quarters for review and endorsement.

10 Quarterly work plans will be prepared based on the overall project objectives and performance indicators. These will be used to measure performance. It is through these reports and meetings that the project approach and activities will be formally refined. The PMO will present the project status and accomplishment to the PSC every quarter. A quarterly work plan based on project objectives and performance indicators will be presented, evaluated and adjusted as and when necessary.

15 The APR/PIR will provide a more in-depth summary of work-in-progress, measuring performance against both implementation and impact indicators. Any adjustments in project approach will be reported to the Regional Project Steering Committee who will evaluate and approve the adjustments recommended.

20 The project is subject to two in-depth independent reviews. One will be conducted in the mid-term (first quarter of the third year) and the other will be scheduled upon project termination. A terminal report would be completed prior to the completion of the project and would detail project achievements and lessons learned. Additional independent evaluation may be conducted if UNDP and the GEF deem it necessary.

25 The project will coordinate with all the project partners. The continuous monitoring and evaluation of all project activities, even after completion of the project period, will bring sustainability of the project with desired benefits in the long run. All evaluation reports will be uploaded to the project website for widespread dissemination. A formal Monitoring and Evaluation Strategy will be developed and implemented in the full-scale project to track the activities and contributions of the activities by all the project partners, in terms of both in-cash and in-kind contributions as detailed in the attached letters of commitment. These M&E findings will be reported on in the project's two in-depth independent reviews.

30 To accord proper acknowledgement to GEF for providing funding, a GEF logo will appear on all relevant publications and documents produced by the project, including among others, project hardware purchased with GEF funds. Any citation from any of the BRESL project publications and documents will also accord proper acknowledgment to GEF. The UNDP logo should be more prominent and separated from the GEF logo if possible, as UN visibility is important for security purposes.

## ANNEX A



Project Title: UNDP/GEF Barrier Removal to the Cost-effective Development and Implementation of Energy Efficiency Standards and Labeling Project (BRESL)

Period Covered: January 1 - December 31, 2010

Strategy & Expected Outcomes/ Outputs	Indicators (Outcome and Output Level)	Baseline	Target (by Dec. 31, 2013)	Means of Verification	Key Annual Targets/ outputs for Year 2 (2010)	Key Activities in Year 2 – 2010	Updated Risk (Outcome and Output Level)	2010 Timeframe			
								Q1	Q2	Q3	Q4
<b>GOAL:</b> Promotion of energy efficient product use, reduction of energy consumption and GHG emission, promote the application of energy-saving technologies in China	Reduction of GHG emissions from thermal power generation by EOP, MMT/yr	0	2.24 Mt/yr in year 2013 (Calculation based on UNDP's BRESL baseline analysis sheet)	Final Report in Year 5		The project activities are continued	The sustainability of the support by key stakeholders in the participating countries can not be insured	X	X	X	X
	Reduction in the annual growth rate of GHG emissions from thermal power generation by EOP, %						Effective project coordination at the national and/or regional levels can not be insured				
								Failure of EE products to perform as claimed by manufacturers resulting to customer dissatisfaction			
<b>OBJECTIVE:</b> Removal of barriers to the successful implementation of energy standards and labeling policies and programs in China	Reduction in total electricity use in the residential, commercial and industrial sectors by EOP, GWh/yr	0	2,048 GWh/yr in year 2013	Final Report in Year 5		The project activities are continued	Continued political support by governments in China can not be insured.	X	X	X	X
	Market share of energy efficient appliances and equipment by EOP, %	0	5-10				Manufacturers are not open to new ideas on ways to improve their products, and consumers can not aware the importance of energy saving and purchase energy-efficient products on their own initiative				
Strategy & Expected Outcomes/ Outputs	Indicators (Outcome and Output Level)	Baseline	Target (by Dec. 31, 2010)	Means of Verification	Key Annual Targets/ outputs for Year 2 (2010)	Key Activities in Year 2 – 2010	Updated Risk (Outcome and Output Level)	2010 Timeframe			
								Q1	Q2	Q3	Q4

**Component 1: ES&L Policy Making Program**

**OUTCOME: Enhancing China's ES&L legal foundations, and relevant agencies' awareness of global ES&L.**

<p><b>1.1:</b> <b>Strategy:</b> The Research of Medium- and Long-term Implementation Plan of China Energy Efficiency Standards, Labels, and Energy Saving Certification for Energy-using Products</p> <p><b>Outputs:</b> The energy saving potential, social and economic benefit of various energy-using products are studied and understood</p>	<p>The rough draft report of energy saving potential, social and economic benefit of various energy-using products</p>	<p>0</p>	<p>1</p>	<p>Submission of related report</p>	<p>Complete the draft report</p>	<p>Conduct wide investigation and comprehensive research on various energy-using products</p>	<p>Some critical industry, market, and energy efficiency data may be difficult to obtain</p>			<p>X</p>	<p>X</p>
<p><b>1.2:</b> <b>Strategy:</b> International Publicity and Promotion of China Energy Efficiency Standards, label, and certification</p> <p><b>Outputs:</b> China Energy Efficiency standards, label, and certification related information are collected and compiled.</p>	<p>Report on the design of specialized publicity and Promotion website</p>	<p>0</p>	<p>1</p>	<p>Submission of related report</p>	<p>1 progress report of design and construction of publicity and promotion website</p>	<p>Complete the design of the publicity and promotion website</p>				<p>X</p>	<p>X</p>

**Component 2: ES&L Capacity-Building Program**

**OUTCOME: Improved institutional and individual capacity to develop and implement ES&L**

<p><b>2.1:</b> <b>Strategy:</b> Training for ES&amp;L local enforcement officials</p> <p><b>Outputs:</b> Relevant agencies and officials are trained to better carry out ES&amp;L policies</p>	<p>Training Guide for ES&amp;L Local Enforcers</p>	<p>0</p>	<p>1</p>	<p>Provide the training guide</p>	<p>Training guide and reports of training activities</p>	<p>Finished the designing of training courses and training guide</p>	<p>There may be some difficulties in recruitment of excellent training experts</p>		<p>X</p>	<p>X</p>	<p>X</p>
	<p>The reports of the training activities</p>	<p>0</p>	<p>1</p>	<p>Provide training reports in at least one city</p>							
	<p>The evidence of media coverage and dissemination of training activities</p>	<p>0</p>	<p>2</p>	<p>provide the evidence of at least 2 times of media coverage and dissemination of training activities</p>							



<b>2.2:</b> <b>Strategy:</b> Development/Revision of EE standard and label implementation rules  <b>Outputs:</b> The industry and market status, and development and implementation of EE labeling programs on CFLs and fluorescent lamp ballasts are investigated	The report of the industry and market status, and development and implementation of EE labeling programs on CFLs	0	1	Provide the reports	The investigation reports of CFLs and fluorescent lamp ballasts	Finish the industry and market investigation of CFLs and fluorescent lamp ballasts				X	X
	The report of the industry and market status, and development and implementation of EE labeling programs on CFLs and fluorescent lamp ballasts	0	1								
<b>2.3:</b> <b>Strategy:</b> Strengthening of national and regional testing and certification infrastructure  <b>Outputs:</b> Onsite inspection of labs contributing to standardizing their management and enhancing their testing capabilities	The onsite inspection reports of various labs	0	50	Provide the onsite inspection reports	The onsite inspection reports	Conduct onsite inspection of energy efficiency testing labs as much as possible	There may be some difficulties in recruitment of a comparatively large amount of high-quality technical experts of each target product	X	X	X	
	Energy efficiency testing procedures for CFLs	0	2								
<b>2.4:</b> <b>Strategy:</b> Progress evaluation on implementation status of China Energy Label and policy suggestions  <b>Outputs:</b> Market research model on energy efficiency of main energy-using products and evaluation model for China Energy Label policy implementation effect with high maneuverability are developed	Market research model on energy efficiency of main energy-using products and evaluation model for China Energy Label policy implementation effect	0	2	Provide the two models	Market research model and China Energy Label policy evaluation model	Develop scientific models with high maneuverability				X	X

<p><b>5.2:</b> <b>Strategy:</b> Maintenance of database and website of products with EEL</p> <p><b>Outputs:</b> Maintenance of database and website of products with EEL</p>	<p>Maintenance of database and website of products with EEL</p>	<p>0</p>	<p>1</p>	<p>Provide high-quality maintenance of database and website of products with EEL</p>	<p>Maintenance of database and website of products with EEL</p>	<p>Conduct high-quality maintenance of database and website of products with EEL</p>				<p>X</p>	<p>X</p>
<p><b>5.5:</b> <b>Strategy:</b> Organization and conduct of the conference on ES&amp;L harmonization of refrigerators, ballasts, electric Motors, and electric rice cookers</p> <p><b>Outputs:</b> Differences in ES&amp;L of electric motors, ballasts and refrigerators in BRESL countries are investigated, and the harmonization feasibility is evaluated</p>	<p>Feasibility evaluation report on ES&amp;L harmonization of electric motors</p>	<p>0</p>	<p>1</p>	<p>Provide feasibility evaluation report on ES&amp;L harmonization of electric motors</p>	<p>Feasibility evaluation report on ES&amp;L harmonization of electric motors</p>	<p>Conduct international investigation and research on ES&amp;L of refrigerators, ballasts and electric motors</p>	<p>Lacking effective organization of Technical Working Groups (TWG) activities may slow down the progress of the ES&amp;L harmonization</p>			<p>X</p>	<p>X</p>

## ANNEX A



Project Title: UNDP/GEF Barrier Removal to the Cost-effective Development and Implementation of Energy Efficiency Standards and Labeling Project (BRESL)

Period Covered: January 1 - December 31, 2010

Strategy & Expected Outcomes/ Outputs	Indicators (Outcome and Output Level)	Baseline	Target (by Dec. 31, 2013)	Means of Verification	Key Annual Targets/ outputs for Year 2 (2010)	Key Activities in Year 2 – 2010	Updated Risk (Outcome and Output Level)	2010 Timeframe			
								Q1	Q2	Q3	Q4
<b>GOAL:</b> Promotion of energy efficient product use, reduction of energy consumption and GHG emission, promote the application of energy-saving technologies in China	Reduction of GHG emissions from thermal power generation by EOP, MMT/yr	0	2.24 Mt/yr in year 2013 (Calculation based on UNDP's BRESL baseline analysis sheet)	Final Report in Year 5		The project activities are continued	The sustainability of the support by key stakeholders in the participating countries can not be insured	X	X	X	X
	Reduction in the annual growth rate of GHG emissions from thermal power generation by EOP, %						Effective project coordination at the national and/or regional levels can not be insured				
								Failure of EE products to perform as claimed by manufacturers resulting to customer dissatisfaction			
<b>OBJECTIVE:</b> Removal of barriers to the successful implementation of energy standards and labeling policies and programs in China	Reduction in total electricity use in the residential, commercial and industrial sectors by EOP, GWh/yr	0	2,048 GWh/yr in year 2013	Final Report in Year 5		The project activities are continued	Continued political support by governments in China can not be insured.	X	X	X	X
	Market share of energy efficient appliances and equipment by EOP, %	0	5-10				Manufacturers are not open to new ideas on ways to improve their products, and consumers can not aware the importance of energy saving and purchase energy-efficient products on their own initiative				
Strategy & Expected Outcomes/ Outputs	Indicators (Outcome and Output Level)	Baseline	Target (by Dec. 31, 2010)	Means of Verification	Key Annual Targets/ outputs for Year 2 (2010)	Key Activities in Year 2 – 2010	Updated Risk (Outcome and Output Level)	2010 Timeframe			
								Q1	Q2	Q3	Q4

**Component 1: ES&L Policy Making Program**

**OUTCOME: Enhancing China's ES&L legal foundations, and relevant agencies' awareness of global ES&L.**

<p><b>1.1:</b> <b>Strategy:</b> The Research of Medium- and Long-term Implementation Plan of China Energy Efficiency Standards, Labels, and Energy Saving Certification for Energy-using Products</p> <p><b>Outputs:</b> The energy saving potential, social and economic benefit of various energy-using products are studied and understood</p>	<p>The rough draft report of energy saving potential, social and economic benefit of various energy-using products</p>	<p>0</p>	<p>1</p>	<p>Submission of related report</p>	<p>Complete the draft report</p>	<p>Conduct wide investigation and comprehensive research on various energy-using products</p>	<p>Some critical industry, market, and energy efficiency data may be difficult to obtain</p>			<p>X</p>	<p>X</p>
<p><b>1.2:</b> <b>Strategy:</b> International Publicity and Promotion of China Energy Efficiency Standards, label, and certification</p> <p><b>Outputs:</b> China Energy Efficiency standards, label, and certification related information are collected and compiled.</p>	<p>Report on the design of specialized publicity and Promotion website</p>	<p>0</p>	<p>1</p>	<p>Submission of related report</p>	<p>1 progress report of design and construction of publicity and promotion website</p>	<p>Complete the design of the publicity and promotion website</p>				<p>X</p>	<p>X</p>

**Component 2: ES&L Capacity-Building Program**

**OUTCOME: Improved institutional and individual capacity to develop and implement ES&L.**

<p><b>2.1:</b> <b>Strategy:</b> Training for ES&amp;L local enforcement officials</p> <p><b>Outputs:</b> Relevant agencies and officials are trained to better carry out ES&amp;L policies</p>	<p>Training Guide for ES&amp;L Local Enforcers</p>	<p>0</p>	<p>1</p>	<p>Provide the training guide</p>	<p>Training guide and reports of training activities</p>	<p>Finished the designing of training courses and training guide</p>	<p>There may be some difficulties in recruitment of excellent training experts</p>		<p>X</p>	<p>X</p>	<p>X</p>
	<p>The reports of the training activities</p>	<p>0</p>	<p>1</p>	<p>Provide training reports in at least one city</p>							
	<p>The evidence of media coverage and dissemination of training activities</p>	<p>0</p>	<p>2</p>	<p>provide the evidence of at least 2 times of media coverage and dissemination of training activities</p>							

<b>2.2:</b> <b>Strategy:</b> Development/Revision of EE standard and label implementation rules  <b>Outputs:</b> The industry and market status, and development and implementation of EE labeling programs on CFLs and fluorescent lamp ballasts are investigated	The report of the industry and market status, and development and implementation of EE labeling programs on CFLs	0	1	Provide the reports	The investigation reports of CFLs and fluorescent lamp ballasts	Finish the industry and market investigation of CFLs and fluorescent lamp ballasts					X	X
	The report of the industry and market status, and development and implementation of EE labeling programs on CFLs and fluorescent lamp ballasts	0	1									
<b>2.3:</b> <b>Strategy:</b> Strengthening of national and regional testing and certification infrastructure  <b>Outputs:</b> Onsite inspection of labs contributing to standardizing their management and enhancing their testing capabilities	The onsite inspection reports of various labs	0	50	Provide the onsite inspection reports	The onsite inspection reports	Conduct onsite inspection of energy efficiency testing labs as much as possible	There may be some difficulties in recruitment of a comparatively large amount of high-quality technical experts of each target product		X	X	X	
	Energy efficiency testing procedures for CFLs	0	2									
<b>2.4:</b> <b>Strategy:</b> Progress evaluation on implementation status of China Energy Label and policy suggestions  <b>Outputs:</b> Market research model on energy efficiency of main energy-using products and evaluation model for China Energy Label policy implementation effect with high maneuverability are developed	Market research model on energy efficiency of main energy-using products and evaluation model for China Energy Label policy implementation effect	0	2	Provide the two models	Market research model and China Energy Label policy evaluation model	Develop scientific models with high maneuverability					X	X

<p><b>5.2:</b> <b>Strategy:</b> Maintenance of database and website of products with EEL</p> <p><b>Outputs:</b> Maintenance of database and website of products with EEL</p>	<p>Maintenance of database and website of products with EEL</p>	<p>0</p>	<p>1</p>	<p>Provide high-quality maintenance of database and website of products with EEL</p>	<p>Maintenance of database and website of products with EEL</p>	<p>Conduct high-quality maintenance of database and website of products with EEL</p>				<p>X</p>	<p>X</p>
<p><b>5.5:</b> <b>Strategy:</b> Organization and conduct of the conference on ES&amp;L harmonization of refrigerators, ballasts, electric Motors, and electric rice cookers</p> <p><b>Outputs:</b> Differences in ES&amp;L of electric motors, ballasts and refrigerators in BRESL countries are investigated, and the harmonization feasibility is evaluated</p>	<p>Feasibility evaluation report on ES&amp;L harmonization of electric motors</p>	<p>0</p>	<p>1</p>	<p>Provide feasibility evaluation report on ES&amp;L harmonization of electric motors</p>	<p>Feasibility evaluation report on ES&amp;L harmonization of electric motors</p>	<p>Conduct international investigation and research on ES&amp;L of refrigerators, ballasts and electric motors</p>	<p>Lacking effective organization of Technical Working Groups (TWG) activities may slow down the progress of the ES&amp;L harmonization</p>			<p>X</p>	<p>X</p>