PROJECT EXECUTIVE SUMMARY

REQUEST FOR Council Work Program Inclusion
UNDER THE GEF Trust Fund

GEFSEC PROJECT ID: 3327
IA/EXA PROJECT ID: 2777
COUNTRY: Bangladesh, China, Indonesia, Thailand, and Vietnam
PROJECT TITLE: Asia: Barrier Removal to the Cost-Effective Development and Implementation of Energy Efficiency Standards and Labeling Project (BRESL)
GEF IA/EXA: United Nations Development Programme (UNDP)
OTHER PROJECT EXECUTING AGENCY(IES): National Development and Reform Commission/ China Standard Certification Center – Lead agencies
DURATION: 5 Years
GEF FOCAL AREA: Climate Change
GEF STRATEGIC OBJECTIVES: Promoting widespread adoption of energy-efficient technologies and practices in the appliance and building sectors.
GEF OPERATIONAL PROGRAM: OP5 – Removal of Barriers to Energy Efficiency and Energy Conservation
PIPELINE ENTRY DATE: May 2005
EXPECTED STARTING DATE: October 2007

FINANCING PLAN ($)		
	PPG*	Project**
GEF Total	50,000	6,800,000
Co-financing	(provide details in Section b: Co-financing)	
GEF IA/ExA	10,000	-
BRESL Governments	-	23,549,900
Others	12,000	3,805,000
Co-financing Total	22,000	27,354,900
Total	**72,000**	**34,154,900**
Financing for Associated Activities If Any:		

* This refers to the PDF-A exercise
** For multi-focal projects, indicate agreed split between focal area allocations

FOR JOINT PARTNERSHIP**		
GEF PROJECT/COMPONENT ($)		

*** Projects that are jointly implemented by more than one IA or ExA

CONTRIBUTION TO KEY INDICATORS IDENTIFIED IN THE FOCAL AREA STRATEGIES:

- GHG emissions reduction from utilization of energy efficient appliances/equipment in the region by Year 5 (2011) = 22.0 million tons/year CO_2
- Energy savings from the use of energy efficient appliances/equipment by Year 5 (2011) = 24,021 GWh/year
- Increase in market share of efficient products by Year 5 (2011) = 25%

Approved on behalf of the United Nations Development Programme (UNDP). This proposal has been prepared in accordance with GEF policies and procedures and meets the standards of the GEF Project Review Criteria for work program inclusion.

Y. Glemarec

Yannick Glemarec
Deputy Executive Coordinator
UNDP/GEF
Date: 30 April 2007

Manuel L. Soriano
Regional Technical Advisor – Climate Change
Tel. and email: +66-2-2882720;
manuel.soriano@undp.org

1. PROJECT SUMMARY

PROJECT RATIONALE, OBJECTIVES, OUTCOMES/OUTPUTS, AND ACTIVITIES

Experience in Asia, as well as in many other countries in the world, is that energy-efficiency standards and labeling (ES&L) programs and policies are among the most effective ways to improve energy efficiency, and energy efficiency improvement is one of the most effective ways to reduce emissions of greenhouse gases. The proposed BRESL project will reduce greenhouse gas emissions in the participating countries (hereinafter referred to as "BRESL countries") by removing barriers to effective ES&L programs and policies, leading to significantly expanded ES&L programs in the region, thereby substantially reducing energy consumption in the participating countries.

The proposed project will focus on building capabilities and interest to pursue ES&L efforts in each of the participating countries. By providing technical assistance to the individual countries to *actually set and begin to implement* standards and labels on a menu of targeted products, the proposed project will result in concrete energy savings and CO2 emission reduction benefits during the project period. The project will focus on six products: (1) refrigerators; (2) room air conditioners; (3) electric motors; (4) ballasts for fluorescent tubes; (5) electric fans; and (6) compact fluorescent lamps. These appliances and equipment account for the majority of electricity consumption in the residential and industrial sectors, and are covered in the national ES&L programs of a number of Asian countries. The harmonization objective of the project will encourage regional trade in energy-efficient products. Harmonization is envisioned to serve the interests of all countries involved, whether more or less advanced in their development of an ES&L program. This proposed project will begin this long-term project, achieving concrete harmonization progress by project end.

The BRESL project is comprised of 5 major components consisting of complementary activities designed to remove barriers to ES&L and focusing on: (1) ES&L Policy Making; (2) ES&L Capacity Building; (3) ES&L Manufacturer Support; (4) ES&L Regional Cooperation; and, (5) ES&L Pilot Projects. Among the expected outcomes resulting from BRESL include: (1) New minimum efficiency standards for the target products adopted in at least 4 countries, reducing unitary energy use for these products by at least 10% relative to business as usual (4% for motors); (2) At least 4 countries adopt new or improved appliance and equipment energy efficiency labeling schemes; (3) ES&L programs are operating in at least 5 BRESL countries; (4) Regional cooperation on ES&L efforts; (5) Majority of appliance/equipment manufacturers in the region recognize the benefits of, and opportunities for, ES&L efforts to increase their profits; (6) Mutual recognition agreements and product certification and posting procedures in place; (7) Increased market share of EE equipment/appliances in the different countries and in the region as a result of the ES&L programs; and, (8) Energy savings from the utilization of energy efficient appliances/equipment in the end use sectors in each BRESL country.

KEY INDICATORS, ASSUMPTIONS, AND RISKS (FROM LOG FRAME)

The goal of the project is the reduction of GHG emissions arising from the generation of electricity from thermal power generation units and used in appliances/equipment in the residential, commercial, and industrial sectors of the countries participating in the project. Its key overall success indicators are: (a) Cumulative CO2 emissions reduction of about 34.5 million tons from utilization of energy efficient appliances/equipment in the region by 2011; (2) Cumulative energy savings of about 37,688 GWh from the use of energy efficient appliances/equipment by 2011; and,

(3) Average 10% increase in energy efficiency of target products sold in 2011. The project success indicators are shown in the Project Planning Matrix (PPM) in Annex B.

The overall project risk is moderate. While all efforts are made to ensure the effective design and implementation of the project activities, there are some risks that will be addressed to ensure success of the project. The PPM shows a detailed overview of the project's risk and assumptions. 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) Financing of investments for manufacturers to modify their production facilities may not be available. (d) ineffective project coordination at the national and/or regional levels; (e) failure of EE products to perform as claimed by manufacturers resulting in customer dissatisfaction; (f) unabated proliferation of illegally traded and unreliable EE equipment/appliances; and, (g) 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.

To address these risks, the project will 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.

2. COUNTRY OWNERSHIP

COUNTRY ELIGIBILITY

All of the five (5) BRESL countries have ratified the UNFCCC. The ratification dates are as follows: Bangladesh (15 April 1994); China (5 January 1993); Indonesia: (23 August 1994); Thailand (28 December 1994); and, Vietnam (16 November 1994).

All of these countries have submitted their First National Communications under the framework of the UNFCCC. These communications all highlighted that EC&EE, in general, and ES&L, in particular are among the measures each country is considering for the reduction of GHG emissions. At present, some of the participating countries have already carried out ES&L programs. Two of them (China & Korea) are already well-advanced in their activities in this area. The others are either just starting (Bangladesh, Indonesia, Vietnam) or have done significant work on ES&L as part of their demand side management (DSM) activities (Thailand). All of these countries are now preparing their Second National Communications to the UNFCCC.

COUNTRY DRIVENNESS

UNDP came up with the concept of this regional ES&L project as part of its initiative to promote energy and environment for sustainable development back in May 2004. Since then, the development of the BRESL has involved consultation meetings with the participating countries starting mainly with energy officials in the ASEAN countries. A regional survey was also carried out in May 2006 to identify ongoing and planned ES&L initiatives in the Asian region as well as the barriers to ES&L development and implementation in each participating country and those that affect and hinder regional efforts to ES&L harmonization. A regional stakeholders' consultation

workshop was conducted in August 2006 to discuss the identified national and regional barriers. Said consultation workshop also came up with the national and regional activities that are proposed to be carried out under the BRESL project, including the project implementation and management arrangements.

BRESL is currently the only regional ES&L barrier removal initiative in Asia. It has direct linkages to and collaboration with ongoing Asia-Pacific regional and national programs. These include ongoing and planned ES&L programs of the participating countries, most of which are in China and Korea. BRESL will also work in collaboration with the ES&L activities of the International Copper Association (ICA) and the Collaborative Labeling and Appliance Standards Program (CLASP) in some of the participating countries. It also has direct linkage with two major international ES&L initiatives on compact fluorescent lamps (CFLs) - the International CFL Harmonization Initiative, and the Efficient Lighting Initiative, which is a continuation of a US$ 15 million, seven-country, GEF-funded program implemented by the International Finance Corporation (IFC). Some of these activities have parallel activities that, as per agreement with the project proponents/owners, would be subsumed in the BRESL Project.

3. PROGRAM AND POLICY CONFORMITY

FIT TO GEF FOCAL AREA STRATEGIC OBJECTIVES AND OPERATIONAL PROGRAM

The proposed project is consistent with the guidelines/requirements of Operational Programme No. 5 – Removal of Barriers to Energy Efficiency and Energy Conservation. It is in line with the GEF Climate Change strategic objective CC-1: Energy efficient buildings and appliances, which targets an increased market penetration of energy efficient technologies, practices, products and appliances in the residential and commercial building markets.

PROJECT DESIGN

The proposed project will involve a mix of regional and national activities. Countries will work together on training, technical analysis, compilation of reports on lessons learned, development of model standards and procedures, and regular consultations with each other. Individual countries will use these regional outputs to develop and implement their own standards and labels. In addition, each country will conduct pilot projects to address country-specific needs.

The heart of the project is six regional product-specific working groups that will conduct and oversee technical work that develops model test procedures, standards, and voluntary labeling levels for each targeted product. These model standards will include multiple levels (tiers) in order to fit the needs of different countries. In this way, some of the more advanced countries can adopt more stringent tiers while countries just starting ES&L programs can adopt less stringent tiers. By working together, workloads can be shared, expenses reduced relative to each country doing their own independent analysis, and standards harmonized (same procedures and formats, with a limited number of actual levels in place).

Baseline Scenario

Countries in the Asian region are at various levels of development and implementation of ES&L programs. Some countries in the region, such as Korea, China, Thailand, and the Philippines have

fairly well developed standards and labeling programs for several products, but are at variance from each other. Other countries have programs in their beginning stages or no programs at all.

Presently, ES&L programs are carried out at the national level and – despite the regional cooperation efforts mentioned above – nearly entirely without the benefit of exchange of both technical and human capital with other countries in the region. Initial indications of interest from some of the target countries in the region (particularly those from ASEAN) were expressed during an APEC-sponsored energy efficiency standards and label workshop that was held in Taiwan in November 2003.

The Baseline Scenario will be a continuation of existing ES&L programs with an assumption that future implementation of programs proceeds at the trajectory of the past five years. For most of the participating countries, this means that under the baseline scenario, perhaps one or two new ES&L programs would be added during the five-year period of this BRESL project. Based on studies carried out on ES&L in the region and from the BRESL Survey, the baseline, or business-as-usual (BAU), scenario will most likely be characterized by the following:

- The rate at which MEPS and labeling programs are implemented proceeds at a very slow pace, with most countries (with the exception of China and Korea) implementing only voluntary labeling programs and no more than one MEPS every five years.
- Without the BRESL project, efficiency levels would gradually increase under a BAU scenario, from 0.2 % to as high as 1% per year, depending on the product.

Alternative Scenario

Under the alternative scenario, the participating Asian countries (i.e. BRESL countries) will develop a much-improved capacity to design and implement national ES&L programs. BRESL will facilitate development of efficiency programs in the participating countries through technical assistance that leads to direct implementation; through capacity building in all aspects of ES&L activities; and through sharing of experience and steps towards harmonization of energy-performance test procedures, product certification procedures, and product standards. Under BRESL, countries with extensive ES&L experience such as Korea, China (for standards) and Thailand (for labels) will help to mentor other participating countries. Such a regional program will help to collectively eliminate ineffective practices, reduce financial barriers, and strengthen both policy formulation and enforcement. The overall effect of BRESL will be to increase the rate at which energy-efficient products are developed by local manufacturers, recognized and supported by government policy, and purchased and used by consumers.

The Alternative Scenario will be a concerted effort that includes substantial regional cooperation and information sharing but leads to concrete implementation of MEPS and labeling programs for the six targeted products within the five-year duration of the project. The realization of the Alternative Scenario will result in the following outcomes: (1) Implementation of MEPS and energy labeling schemes for all six products in all countries that participate for the particular product; (2) Mandatory MEPS are announced for each of the products at the end of Year 2 and take effect in Year 4 of the BRESL project. The MEPS lead to an immediate reduction in energy use of 4 to 30%, depending on the product; (3) Mandatory labeling programs are also implemented in each BRESL country, and starting in Year 5, they lead to additional savings beyond the MEPS of 0.4% to 2% annually, depending on the product; (4) Increased utilization of energy efficient appliances/equipment in the commercial, industrial and residential sectors of the BRESL countries; and, (5) Significant energy

savings from the utilization of energy efficient appliances/equipment and the corresponding GHG emissions reduction.

The analysis of savings only applies to new products being sold, i.e., it does not include efficiency improvements in the existing stock of equipment. In addition, the difference between baseline and alternative electricity consumptions does not translate directly to electricity savings attributed to BRESL. This is due to electricity savings attributed to reduced purchases of incandescent lamps, and these are calculated at 2.75 times annual unit electricity consumption of CFLs.

Table 1 summarizes the expected results of the Baseline and Alternative Scenarios and the net project impact in terms of electricity savings (GWh/year) and corresponding CO_2 emission reductions (MMT CO_2 per year, and cumulative).

Table 1: Summary of Expected Results of Baseline and Alternative Scenarios

Indicator	2007	2011	2021	2031
Baseline Electricity Consumption (GWh/yr)	482,068	1,032,132	2,366,352	3,701,553
Alternative Electricity Consumption (GWh/yr)	482,068	1,008,111	2,165,084	3,404,982
Electricity Savings (GWh saved each year)	0	24,021	201,268	296,571
Savings compared to Baseline (% lower than baseline)	0	2.3	8.5	8.0
CO_2 Reductions (MMT/year)	0	23.4	195.1	313.1
CO2 Emission Avoided (% lower that baseline)	0	2.5	9.4	8.8
Cumulative CO_2 Savings (Total MMT)	0	34.5	1,158.7	3,787.4

To achieve the abovementioned outcomes, the BRESL project has been designed to comprise 5 components, consisting of complementary activities primarily aimed at removing barriers to the cost-effective development and implementation of ES&L initiatives. These are:

- ES&L Policy-Making Program: This component is designed to address policy/regulatory barriers that hinder the widespread implementation of ES&L programs. This component will deal on the establishment of legal basis for standards and labels and the provision of technical assistance in the development of regulations for the targeted products.
- ES&L Capacity-Building Program: The building of institutional and individual capacity to secure on-the-ground implementation of standards and labels, including establishment of regional working groups for each of the targeted products are the main focus of the activities that will be carried out in this component of the BRESL project.
- ES&L Manufacturer Support Program: This component will address issues that hinder local appliance and equipment manufacturers and suppliers in promoting the market for energy efficient products and for the former to locally produce such products. The activities that will be carried out consist of provision of information and technical assistance for local product manufacturers to help them develop efficient products and realize profit opportunities from efficient products. This component will also address retailers, who are an important constituency for energy efficiency standards and labels, as they are key players in the promotion of high-efficiency equipment through labels and they are often consulted during the standard and label development process.

- ES&L Regional Cooperation Program: The issues concerning regional cooperation in the area of ES&L and harmonization of standards and label are addressed in this component of the BRESL project. A number of regional cooperation activities that will aid individual countries with development and implementation of their ES&L programs and that will take important steps towards regional harmonization of standards and labels will be implemented. This component emphasizes the importance of enhancing cooperation regionally and internationally, and not just within the BRESL countries. Through its Project Steering Committee, the project would attempt to build on experience in S&L programs in other countries, both industrialized as well as developing countries, including those supported through GEF projects.
- ES&L Pilot Projects: This component will focus on the need to show the BRESL countries the application of the various aspects of ES&L implementations. There will be pilot activities that will be implemented on a demonstration basis by individual countries, or groupings of countries, showcasing various aspects of the design, facilitation and implementation of ES&L programs, including activities that build on the regional foundation provided by BRESL. This will include a number of activities implemented at the national level, with coordination across the region, as well the initial work on regional harmonization led by China.

SUSTAINABILITY (INCLUDING FINANCIAL SUSTAINABILITY)

Sustainability is an integral element of the BRESL activities and is ensured through the outputs of most of the project components. The sustainability of the institutional elements of the project will be ensured through the adoption of collaborative approaches and strategies that seek to foster and reinforce the long-term sustainability of existing institutional and coordination structures that have been established and are operational at both the national and regional levels with regards to projects dealing with energy and trade.

Since the BRESL is designed as a strong capacity-building project (as part of the barrier removal objective), the main project outputs will not only be new energy efficiency standards and labels, but also institutional structural growth with a capacity to effectively maintain and revise the ES&L program over time. The government agency with the ES&L mandate (or those actively engaged in energy conservation and energy efficiency promotion activities) in each Asian country, which will play a significant role in the implementation of the national activities under BRESL, is expected to continue to spearhead and sustain the activities after the project life. The national activities of the BRESL project will be mainstreamed into the country's energy efficiency program in the next 10 years. Periodic monitoring and evaluation of ES&L programs and activities in each country will be institutionalized and will be continued even after the end of the BRESL project. This will bring sustainability of the project with desired benefits in the long run.

Regional cooperation in the area of ES&L will be encouraged and established to enable South-South transfer of technical know how and technology. A network of collaborators throughout the region and around the world with a common mission, bringing attention and high priority to efficiency standards and labels within key development institutions will be established. This is to achieve higher awareness of international developments, benefits of harmonization, and trade advantages. It should be emphasized that BRESL will foster regional collaboration and harmonization throughout the region, which will greatly strengthen the effectiveness of individual national ES&L programs. With this, the market transformation and resulting carbon emission reduction from this project will persist far beyond the term of the project.

REPLICABILITY

BRESL is designed to have a balanced mix of capacity building and enabling environment activities that are tailored to the BRESL countries' specific conditions, markets and regulatory environment, and ES&L programs on the ground. Such balanced mix of activities is expected to bring about, and influence market transformation favoring energy efficient appliances/equipment in the region and shifting investment patterns from standard quality appliances/equipment toward those of the energy efficient varieties. With enhanced enabling environment and the capacity built through the project, replications of several specific interventions that will be carried out in the project are expected.

In particular, the pilot project activities that will be carried out are meant to showcase feasible design and application of ES&L programs, design and manufacturing of energy efficient equipment and appliances, widespread utilization of such equipment/appliances in the commercial, industrial and residential sectors, enforcement of policies and policy support activities, and implementation of financing schemes for supporting projects that promote utilization of energy efficient equipment and appliances. Replicability of the proposed project components will be ensured through the documentation of the package of activities/inputs that went into each EC&EE projects that are in one way or another, directly or indirectly influenced by the BRESL. Note that replication is an integral component of the project design as the expected energy savings from the utilization of energy efficient equipment/appliances (and the corresponding GHG emissions reduction from the reduced electricity demand) rely on the replication of the relevant BRESL activities.

STAKEHOLDER INVOLVEMENT

Since the conceptualization stage of this proposed regional ES&L project, several stakeholder consultations were carried out, as well as during the PDF-A exercise. Most of the stakeholders that were consulted were those involved in national and regional ES&L initiatives such as those in ASEAN and APEC. In addition to this, a regional BRESL survey among institutions in the BRESL countries that are involved directly on ES&L was conducted as part of the PDF-A exercise to enquire about, among others, barriers to ES&L and country expectations from a regional initiative to promote ES&L and regional harmonization of energy efficiency standards & labels. This was done not only for purposes of data gathering but also to ensure broad stakeholder involvement at the national level. A regional stakeholders' consultation workshop was also conducted to agree on the BRESL project's goal, objective, outcomes and activities (national and regional), implementation and management arrangements and budget. Further consultations with the project stakeholders are planned for the project's inception phase where PIC priorities, in particular, will be reconfirmed.

Among the project stakeholders are the Governments of the BRESL countries, and International and Regional Organizations involved in ES&L such as: (1) International Copper Association (ICA); (2) ELI Quality Certification Institute; (3) International CFL Harmonization Institute; and, (4) Collaborative Labeling and Appliance Standard Program (CLASP). The specific stakeholders in each BRESL country are the following:

Country	Stakeholders
Bangladesh	Bangladesh Standards & Testing Institute (BSTI), Center for Energy Studies, Bangladesh University of Engineering & Technology (CES-BUET)
China	National Development and Reform Commission (NDRC), Standards Administration of China (SAC), China National Institute for Standardization (CNIS), China Standards Certification Centre (CSC), Energy Foundation

Country	Stakeholders
Indonesia	Directorate General for Electricity and Energy Utilization (DGEEU)
Korea	Ministry of Commerce, Industry and Environment (MOCIE), Korea Testing Laboratory (KTL)
Thailand	Department of Alternative Energy and Energy Efficiency (DEDE), Electricity Generation Authority of Thailand (EGAT), Thailand Industrial Standards Institute (TISI), Electrical and Electronics Institute (EEI)
Vietnam	Ministry of Industry (MOI), Ministry of Standards (MOST), Electricity of Vietnam

MONITORING AND EVALUATION

Below is the summary of the monitoring plan for high-level success indicators of the BRESL Project.

Success Indicators	Targets (EOP)	Means of Verification	Sampling Frequency	Location
GHG emission (CO_2) reductions	22 MMT/yr	• Monitoring reports on changes in average equipment efficiency and sales; to be provided by participating governments to the PMU	Annually, starting with year 3	PMU
Electricity savings	24,021 GWh/yr	• Same as above	Same as above	PMU
Reduction in product energy usage	10% (4% for motors)	• Same as above.		
Market share of efficient products	1.25X baseline identified in year 3	• Same as above. • Other publications and documents on sales and saturation rates of energy-efficient equipment provided by each country.	Same as above	PMU
ES&L principles in laws & regulations of participating countries	4 countries adopt new laws & regulations	• Official publications or documents on energy-efficiency regulations and policies provided by each selected country. • National statistics on standards and labeling programs as reported on APEC Energy Standards Information System (www.apec-esis.org) • Annual reports to the PMU by each participating country • Project visits and surveys.	Annual as part of country reports to PMU	Countries, compiled and checked by PMU
New standards for AC, refrigerators, ballasts, motors, fans and CFLs	Approved in 4 countries	• Same as above.	Same as above	Same as above
New standards for rice cookers	Adopted in China	• Same as above.	Save as above	Same as above
Labels in use	At least 2 products in 5 countries	• Same as above.	Same as above	Same as above
New testing standards	At least one in at least 4 countries	• Same as above.	Same as above	Same as above
New test facilities	At least 1	• Annual reports to the PMU by	Same as above	Same as above

Success Indicators	Targets (EOP)	Means of Verification	Sampling Frequency	Location
	improved or new facility in at least 2 countries	each participating country • Project visits and surveys.		
Countries with testing and certification procedures	At least 6 countries	• Same as above	Same as above	Same as above
Round-robin testing	Completed	• Report on round-robin testing results	Completed by end of Year 4	Coordinated by PMU
Mutual recognition agreements	At least 3 countries sign	• Memorandums of Understanding on regional cooperation on testing and certification	Annual as part of country reports to PMU	Countries, compiled and checked by PMU
Posting of certification info	At least 4 countries posting	• Annual reports to the PMU by each participating country • PMU staff check of country websites	Same as above	Same as above
Annual data collection system	4 countries have system in place	• Annual reports to the PMU of each participating country • Project visits	Same as above	Same as above
Number of local manufacturers adding efficient products and attributable in part to project interventions	About 60 (i.e., 10 per country; 2-3 per BRESL product)	• Survey of manufacturers receiving reports and technical assistance • Annual reports to the PMU of each participating country	Annual, beginning in year 3	PMU
Number of new efficient products	50	• Survey of manufacturers receiving reports and technical assistance • Annual reports to the PMU of each participating country	Same as above	PMU
Percentage of manufacturers that plan to locally produce EE products.	50%	• Survey of manufacturers receiving reports and technical assistance • Annual reports to the PMU of each participating country	Same as above	PMU
Project website	Up, regularly updated	• Annual reports of the PMU • UNDP-China staff check website	Annual	PMU, UNDP-China
Regional workgroup - # participating countries	At least 5	• Annual reports of the PMU	Annual	PMU, UNDP-China to check
Follow-up plan	Approved & implementation begins	• Approved plan	Year 5	Same as above
Government procurement schemes operating	5	• Official documents on gov't procurement policies • Final evaluation reports on government procurement pilots • Annual reports to PMU by each participating country	Annual, beginning in year 3	PMU
On-line databases of efficient equipment	3	• Annual reports to the PMU by each participating country • PMU staff check on-line databases	Same as above	PMU

Success Indicators	Targets (EOP)	Means of Verification	Sampling Frequency	Location
New consumer education schemes implemented -- # of countries	5	• Final reports on pilot schemes • Annual country reports to PMU	Same as above	PMU

4. FINANCING (for all tables, expand or narrow table lines as necessary)

Excluding the PDF-A cost (US$ 72,000), the estimated total cost of implementing BRESL is US$ 34,154,900. About 1/5 of this is the proposed contribution from the GEF at US$ 6.8 million. The BRESL countries' governments and other co-financiers will provide US$ 27,354,900. The estimated project budget distribution is as follows: ES&L policy making (24.0%); ES&L capacity building (32.1%); ES&L manufacturer support (17.0%); ES&L regional cooperation (11.3%); ES&L pilot projects (9.5%); and, project management including monitoring and evaluation (6.2%).

The GEF contribution will be utilized for the provision of technical assistance in the various barrier removal activities. The estimated distribution of the GEF funds is as follows: ES&L policy making (19.0%); ES&L capacity building (30.5%); ES&L manufacturer support (10.1%); ES&L regional cooperation (9.5%); ES&L pilot projects (US$ 17.7%); and, project management support including monitoring and evaluation (13.2%).

a) **PROJECT COSTS**

Project Components/Outcomes	Co-financing ($)	GEF ($)	Total ($)
1. ES&L Policy Making Enhancement Program	6,903,000	1,289,20	8,192,200
2. ES&L Capacity Development Program	8,903,200	2,076,100	10,979,300
3. ES&L Product Manufacturing Support Program	5,120,900	688,600	5,809,500
4. ES&L Regional Cooperation Program	3,200,700	643,100	3,843,800
5. ES&L Demonstration Program	2,026,600	1,208,800	3,229,400
6. Project Management budget/cost*	1,200,500	900,200	2,100,700
Total project costs	**27,354,900**	**6,800,000**	**34,154,900**

* This item is an aggregate cost of project management; breakdown of this aggregate amount should be presented in the table b) below.

b) PROJECT MANAGEMENT BUDGET/COST[1]

Component	Estimated staff-weeks	GEF ($)	Other sources ($)	Project total ($)
Locally recruited personnel*	1396	26,450	322,600	349,050
Internationally recruited consultants*	187	466,525	0	466,525
Office facilities, equipment, vehicles and communications		221,475	774,300	995,775

[1] For all consultants hired to manage project or provide technical assistance, please attach a description in terms of their staff weeks, roles and functions in the project, and their position titles in the organization, such as project officer, supervisor, assistants or secretaries.

Component	Estimated staff-weeks	GEF ($)	Other sources ($)	Project total ($)
Travel		52,000	129,100	181,100
Miscellaneous		133,750	64,500	198,250
Total		**900,200**	**1,290,500**	**2,190,700**

* Local and international consultants in this table are those who are hired for functions related to the management of project. For those consultants who are hired to do a special task, they would be referred to as consultants providing technical assistance. See details of their services in c) below:

c) **CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS**:

Component	Estimated staff-weeks	GEF ($)	Other sources ($)	Project total ($)
Personnel	1633	115,850	700,500	**816,350**
Local consultants	12,630	1,416,475	11,213,500	**12,629,975**
International consultants	2,212	1,450,550	6,290,800	**7,741,350**
Total	**16,475**	**2,982,875**	**18,204,800**	**21,187,675**

d) **CO-FINANCING SOURCES**[2] (expand the table line items as necessary)

Contributor	Classification	Type	Amount (US$)	Status
Bangladesh Government	Government	Cash & In-Kind	2,000,000	Confirmed
China Government	Government	Cash	10,068,000	EOI
		In-Kind	932,000	
China - Energy Foundation	Foundation	Cash	600,000	Confirmed
Indonesia Government	Government	Cash & In-Kind	2,908,900	EOI
Korea Government	Government	In-Kind	78,000	Confirmed
Thailand Government	Government	Cash & In-Kind	4,478,000	EOI
Vietnam Government	Government	Cash & In-Kind	3,085,000	EOI
International Copper Association	Private	In-Kind	2,900,000	Confirmed
CFL Harmonization Initiative	Regional Organization	Cash	100,000	Confirmed
		In-kind	100,000	
Australian Greenhouse Office	Government	Cash	50,000	Confirmed
		In-kind	50,000	
CLASP	Regional Organization	Cash	5,000	Confirmed
Total			**27,354,900**	

*Reflect the status of discussion with co-financiers. If there are any letters with expressions of interest or commitment, please attach them.

5. INSTITUTIONAL COORDINATION AND SUPPORT

a) CORE COMMITMENTS AND LINKAGES

[2] Refer to the paper on Cofinancing, GEF/C.206/Rev. 1

The main stakeholders for the BRESL are the participating Asian countries, particularly the agency in the government with the ES&L mandate. These were the agencies that provided responses to the BRESL survey and participated in the recently conducted Regional Stakeholders' Consultation Workshop in Beijing (30-31 Aug 2006). Some of these agencies are represented in the ASEAN Energy Efficiency & Conservation Sub-Sector Network (EEC-SSN) and were consulted during the conceptualization stage of BRESL.

For the project implementation, China was designated and confirmed during the Regional Stakeholders' Consultation Workshop as the lead country for the BRESL Project. This UNDP-GEFD project will be implemented based on the UNDP's National Execution (NEX) modality. In this case, China will appoint an implementing partner (i.e., executing agency) that will be responsible for the planning and overall management of the BRESL project activities, reporting, accounting, monitoring and evaluation, supervision of contractors, management and audit of UNDP resources, etc. Per practice in China concerning GEF projects, the executing agency will designate a suitable institution to be the BRESL's designated implementing agency that will execute the project on its behalf. The UNDP country office (CO) in China will be the overall in-charge of the implementation of this UNDP-GEF regional project, with the UNDP-GEF Regional Coordination Unit (RCU) for Asia-Pacific (Bangkok) providing the GEF oversight.

The other co-financiers of the project, particularly donor agencies will also be involved in the promotion, development and implementation of ES&L projects. The BRESL activities are also linked with the ongoing ES&L programs of APEC-ESIS, CLASP, International Copper Association, ELI Quality Certification Institute, International CFL Harmonization Institute, etc.

b) CONSULTATION, COORDINATION AND COLLABORATION BETWEEN IAS, AND IAS AND EXAS, IF APPROPRIATE.

The project was developed in close cooperation of the relevant government agencies involved on ES&L in each BRESL country as well as with the UNDP-GEF RCU (Asia-Pacific) in Bangkok. The UNDP office in Beijing, China is fully involved in the project development taking the lead in the PDF-A activities for this project. Consultations were also made with UNDP-GEF, New York during the project development phase.

The team that developed the BRESL project consulted and involved all the known ongoing ES&L projects in the region in the design and development of the project. Key members of some of these projects were involved in the implementation of the PDF-A exercise. Some of these people may also be involved in the project implementation as members of the regional Project Steering Committee (PSC) of BRESL. The establishment of links with these ongoing projects helped in identifying the relevant activities that will build on the outputs of these projects. The project development team worked in close cooperation with both the local and regional stakeholders. The UNDP COs in the BRESL countries are fully involved in the project development through their participation in the e-mail discussions, in-country discussions on co-financing and in the Regional Stakeholders Consultation Workshop.

C) PROJECT IMPLEMENTATION ARRANGEMENT

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 of activities: (i) enhancing the regional cooperation/ multi-recognize and sharing the best practices of energy efficiency standard and labeling (ES&L), and (ii) developing and implementing country-specific strategies and activities for ES&L to overcome the barriers of reducing the energy consumption within each national context. The proposed organizational structure is shown in Fig. 1.

The management structure of the BRESL project 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 the representatives of the UNDP-GEF Regional Coordination Unit (RCU) for Asia-Pacific, UNDP-China, participating country's Government Focal Points (GFP), NDRC, and also including CSC and the Director of the Regional Project Management Unit (RPMU). 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.

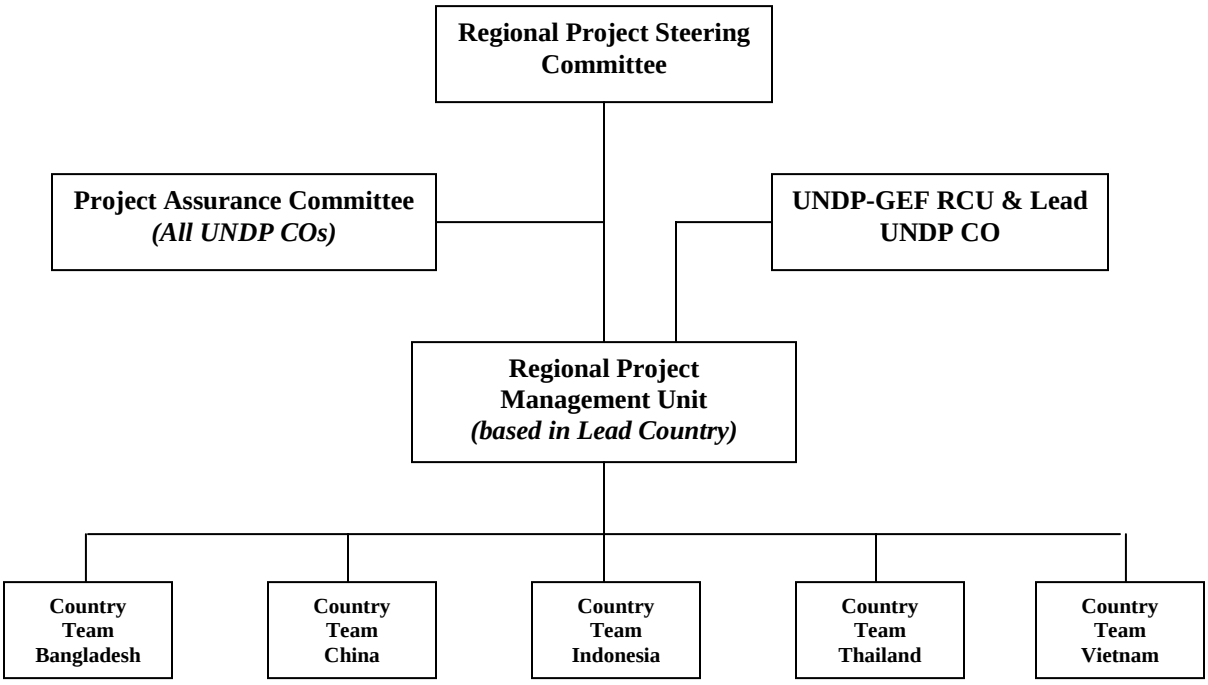

Fig. 1: BRESL Organizational Structure

The second level will mainly be on the implementation of the Country Teams (CTs) in each BRESL country. The CTs, made up of representative from government, the private sector and civil society including NGOs will ensure that the national activities are carried out in 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 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.

ANNEX A: INCREMENTAL COST ANALYSIS

BRESL is comprised of five major components consisting of complementary activities designed to remove barriers to the development and implementation of cost-effective ES&L initiatives.

Component 1: ES&L Policy-Making Program - This component will include several activities to put in place new laws and regulations enabling and establishing equipment standards and labels. It will address the barrier that enabling laws or procedures are not in place in several of the participating countries or suffer from significant limitations. Activities will include providing information and TA to countries without ES&L enabling authority in place so they can pass necessary enabling laws or regulations, and for them to adopt new standards and labels for the six targeted products. In addition, information and TA on standards and labeling implementation will be provided in order to maximize compliance with ES&L regulations. Several of the participating countries lack experience and skills on the analyses and procedures to follow to establish standards and labels. By working together to establish new standards and labels on the six targeted products, substantial and concrete benefits will be achieved. Documentation of these benefits will help to build support for continued ES&L activities in each of the participating countries. The activities under this component will collectively cost about US$ 8.192 million. The incremental activities will cost US$1,289,200, which will be financed by the GEF.

Component 2: ES&L Capacity-Building Program - This component will address several barriers including lack of technical know-how on ES&L, lack of institutional capacity on ES&L implementation, absence of adequate information on appliance and equipment efficiency and trends and limited local energy performance testing facilities. The key activities are intended to build capacity for developing and implementing energy standards and codes including staff training, establishment of product-specific working groups, and provision for adequate testing facilities, establishment of regular data collection and reporting processes, and facilitation of mutual recognition agreements (MRAs). The activities under this component will collectively cost around US$ 10.979 million. The incremental activities will cost US$ 2,076,100 which will be financed by the GEF.

Component 3: ES&L Manufacturer Support Program - This component will address the barrier that manufacturers are often distrustful of standards and labels, and their objections can delay ES&L efforts or result in weakening of standards. This component will include the provision of information to manufacturers on ways to improve product efficiency at modest cost; training on ways to use ES&L programs to increase profitability; and technical assistance to individual local manufacturers on these issues. The activities under this component will collectively cost about US$ 5.810 million. The incremental activities will cost US$ 688,600 which will be financed by the GEF.

Component 4: ES&L Regional Coordination Program - This component is intended to help countries to learn from each other so they can emulate successful efforts and avoid relearning mistakes that others have made. In addition, this component will include an activity to plan to follow-up activities when GEF funding ends, so that regional cooperation and progress and standards can continue. The activities under this component will collectively cost around US$ 3.844million. Incremental activities will cost US$ 643,100 which will be financed by the GEF.

Component 5: ES&L Pilot Projects - This component is intended to provide flexibility to individual countries, or groupings of countries, to carry out activities that can showcase specific aspects of the various aspects of the design, facilitation and implementation of ES&L programs, including support activities. The specific pilot projects are on ES&L-related policy research and implementation, marketing and promotion of energy efficient equipment (equipment that exceeds MEPS) that is identified though energy labeling, consumer education on how to identify efficient products or the benefits of purchasing these products. Information on successful pilots will be shared with other countries, so they can replicate them. The activities under this component will collectively cost about US$ 3.229 million. Incremental activities will cost US$ 1,202,800 which will be financed by the GEF.

Project Management – A regional project management unit that will be responsible for the management and coordination of BRESL activities (national & regional) will be established in the lead country (China). National project management offices will also be set up in each BRESL country. The incremental cost required for operating these units including project monitoring and evaluation is US$ 900,200.

ANNEX B: PROJECT LOGICAL FRAMEWORK

NOTE: Duration = 5 years; Year 0 = 2007

Project Strategy	Objectively Verifiable Indicators Indicator	Baseline	Target	Means of Gauging Success	Critical Assumptions
GOAL: Reduction of GHG emissions from thermal power generation in BRESL countries.	• Reduction in GHG emissions from thermal power generation (based on electricity consumption of installed products from 2007-2011)	• CO2 emissions generation in Year 0 = 410.6 MMT/yr • CO2 emission generation in Year 5 = 875.7 MMT/yr	• CO2 emission generation in Year 5 = 853.7 MMT/yr • CO2 emission reduction = 22 MMT/yr by Year 5	• Monitoring reports from participating governments to the PMU	• Continuous and committed support and participation from governments
OBJECTIVE: Removal of barriers to the successful implementation of energy standards and labeling policies and programs in Asia.	• Reduction in total electricity use in the residential, commercial and industrial sectors (based on electricity consumption of installed products from 2007-2011). • Market share of energy efficient appliances and equipment	• Electricity usage in Year 0 = 482,068 GWh/year • Electricity usage in Year 5 = 1,032,132 GWh/yr • Increase in efficiency of products is at rate of 0.2 to 1% per year	• Electricity usage in Year 5 = 1,008,111 GWh/yr • Electricity savings in Year 5 = 24,021 GWh/yr • Market share of efficient products increase 25% in Year 5	• Official publications on sales and saturation rates of EE equipment • Annual reporting on progress from the participating countries	• Proactive participations of equipment suppliers, engineering firms, and financial institutions
• OUTCOMES					
Outcome 1: ES&L Policy-Making Program - *Establishment of legal and regulatory basis for removing lowest EE technologies from the market and promoting high-efficiency technologies.*	• Clear ES&L principles expressed in laws and regulations of participating countries by Year 3. • New minimum standards for air conditioners (A/Cs), refrigerators, fluorescent ballasts, motors, CFLs	• Except for China and Korea, countries lack clear regulatory and legal framework for MEPS and mandatory labeling	• 4 countries adopt new laws and regulations on ES&L by Year 3 • 10% energy savings in new AC by Year 5; 10% energy savings in new refrigerators by Year 5; 30% reduction in losses from new ballasts by Year 5; 4% energy savings for new motors by Year 5; 15% reduction in electricity use from new electric fans by Year 5; 20% reduction in electricity use from rice cookers by Year 5	• Official publications or documents on energy-efficiency regulations and policies provided by each selected country. • National statistics on standards and labeling programs as reported on APEC Energy Standards Information System (www.apec-esis.org) • Annual reports to the PMU by each participating country • Project visits and surveys.	• Continued political support by governments in participating countries to advance legislation.
Outcome 2: ES&L Capacity-Building Program - *Building of institutional and individual capacity to secure on-the-ground implementation of regulatory frameworks, as well as actual standards and labeling programs.*	• New testing standards and testing facilities in place and operational by Year 4. • MRAs in place and enforced for product testing and posting of certification information by Year 4 • Countries with annual data collection and reporting systems in place and being implemented	•	• At least one for the targeted products in at least 3 countries • 3 MRAs signed by Year 4. • Certification information posted on at least 500 products by Year 5 • At least 4 countries have such data gathering system by Year 3	• PMU annual progress reports • Mutual Recognition Agreements (MRAs) between appropriate agencies in each country	• Interest remains at least at current levels throughout the project • Organizations involved with testing have some flexibility to accommodate needs of other countries

Project Strategy	Objectively Verifiable Indicators			Means of Gauging Success	Critical Assumptions
	Indicator	Baseline	Target		
Outcome 3: *ES&L Manufacturer Support Program* - Provision of information and technical assistance to manufacturers of covered products	• Total number of local manufacturers manufacturing EE equipment/appliance • Number of high efficiency models produced • Volume of EE products sold	• Market shares of EE products are low (typically less than 5-10%) • Local manufacturers or suppliers do not produce EE products	• Sales of EE products increase at least 25% by Year 5 • At least 5 local manufacturers begin producing EE equipment	• Survey of manufacturers receiving reports and technical assistance • Annual reports to PMU of each participating country	• Manufacturers will use information they are provided.
Outcome 4: ES&L Regional Cooperation Program - *Regional cooperation and information sharing on-going and helps to maximize impacts*	• Number of national web sites operating and updated annually • Lessons learned reports • Work group activities contributing to regional ES&L harmonization • Regional Follow-up Action Plan	• APEC ESIS web site operating and displays current ES&L programs • CLASP Manual • No regional work group on ES&L	• All BRESL countries have ES&L websites operating by Year 2 and updated at least annually • Report completed & posted by Yr 2 on at least 4 issues • At least countries use harmonized standards • Follow-up action plan (Yr-4)	• Web sites • PMU reports • Lessons Learned reports • Work group minutes • Documentation of MRAs • Documentation of Follow-up plan	• Interest in regional coordination continues • Governments provide support to work group activities
Outcome 5: ES&L Pilot Projects – *Demonstration of various aspects of the development and implementation of ES&L programs*	• Number of countries implementing government procurement schemes for EE products • Number of countries with EE products databases • Number of countries with EE consumer education schemes	• China and Korea implementing government procurement policies • On-line databases of efficient equipment only available in Korea • Limited consumer education and promotion schemes	• 2 countries by Year 3 • 2 additional countries by Year 3 • Successful and acceptable results in at least 3 countries by Year 3, at least two more countries replicate successful schemes	• Official documents on government procurement policies • Websites • Annual PMU Reports • Report on pilot schemes	• Governments will adopt and implement successful schemes • Other countries can find the funds to replicate successful schemes • Consumers interested in web-based information

ANNEX C: RESPONSE TO PROJECT REVIEWS

a) Convention Secretariat Comments and IA/ExA Response

N/A

b) STAP Expert Review and IA/ExA Response

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

STAP Review by Gautam S. Dutt
17 Sep. 2006

Overall comments

Energy efficiency (EE) improvement faces many barriers and promoting activities to reduce these barriers provides economic benefits to energy consumers while reducing CO2 emissions.

This STAP reviewer strongly supports the proposed project.

Additional comments are provided below. Many specific and detailed comments and corrections are marked in the Executive Summary and Project Document that are attached to this STAP Review. File names: Asia BRESL ExecSum 130906 com GD.doc; and Asia BRESL ProDoc 120906-A com GD.doc. These suggestions are intended to facilitate the revision of the project Document.

KEY ISSUES

Scientific and technical soundness of the project

End-use energy efficiency improvement provides an excellent opportunity for reducing GHG emissions. Many barriers impede the full penetration of EE technologies. By aiming to reduce these barriers for electricity efficiency in residential, industrial and commercial sectors through effective standards and labeling (S&L) programs, the proposed project is scientifically and technically sound.

Note, however, that some of the BRESL countries already have S&L programs. It is not clear if these programs are successful, and at least one of the countries does not have an effective compliance regime. Thus, the proposed project should explicitly include an evaluation of previous efforts as well as the development of an effective compliance regime. This reviewer believes that such an activity could be added to, or included within, the five program components (see, e.g. p. 17 of Exec. Summary). The evaluation should include actual equipment performance (see following paragraph).

Note that “Means of Gauging Success” column of the Table in Annex B (Project Planning Matrix) of the Exec. Summary appears not to include any evaluation based on actual performance of the affected equipment. Nor is this included in Part V of the Project Document (Tables 23 and 24). The determination of the actual performance of equipment covered by standards or labeling should be an explicit part of the project, for the outcome to be meaningfully quantifiable.

One of the five components refers to manufacturer support, described as "provision of information and technical assistance," (p. 17 of Exec. Summary). In order to produce more efficient equipment, manufacturers are likely to require investment capital. If the proposed GEF project does not consider that such capital requirements and makes no provisions for it, manufacturers may end up being well informed but unable to manufacture more efficient equipment. This is likely to be especially severe in the poorer BRESL countries such as Bangladesh. The Project Document notes this need, and correctly makes special provisions to encourage financial institutions in Bangladesh to be involved in providing such funds. Moreover, this item should be included among the potential project risks. This reviewer has suggested a line to this effect in Table 22 of the Project Document.

Another weak link appears to be the equipment sellers, especially for household equipment. One recalls one very large appliance retailer in New Jersey not stocking energy efficient models of refrigerators in the early 1980s (after the mandatory labeling program in the US, but prior to mandatory MEPS), on the grounds that the other (less efficient) model provided the same service. Two decades later in Argentina, with neither labels nor MEPS, sellers were equally uninformed on the energy consumption of household appliances. Some countries, e.g. Thailand, have achieved great success insofar as purchasers understand the energy labels. The training of equipment sellers for household equipment is therefore important and a separate component might be included in the project. The role of equipment sellers is particularly important for the success of labeling programs, where energy efficiency improvement depends on the purchasers' informed decisions.

If it is difficult, at this stage, to add more project components, this STAP reviewer strongly recommends that the items mentioned above be included within one or more of the existing five components.

Since the key barriers facing EE are common to many countries, as are the types of programs needed to reduce such barriers, including S&L, a single GEF project covering several Asian countries makes sense.

Identification of global environmental benefits

The principal global environmental benefits of this project are in terms of reduced emissions of CO2 (a greenhouse gas) to the extent that energy efficiency reduces the need for electricity generation, and specifically reduces the need for burning fossil fuels for producing electricity.

It is not possible for this STAP reviewer to check all the emissions reductions estimates. The key assumptions (CO2 emissions factors for power generation in the target countries, and the potential for energy efficiency improvement in the target equipment) appear to be reasonable. Note, however, that two slightly different values of expected emissions reductions over five years are quoted in Part III of the Project Document (highlighted in the text).

The potential global environmental benefits are large, especially considering indirect benefits: China and Korea provide a large fraction of appliances to other countries, and any improvement in these countries is likely to improve energy efficiency elsewhere as well.

How does the project fit within the context of the goals of the GEF?

The project fits very well within the context of GEF goals, specifically through its Operational Programme 5, incorporating strategic priorities CC-1 and CC-2.

Regional context.

The project is regional in scope, involving seven large Asian countries. This allows for experience sharing through project development as well as the creation of common, regional policies to promote EE. Moreover, the project is integrated into APEC activities, including the use of an APEC website, allowing the project to be followed by other countries in the region. The fact that the seven countries use at least seven different official languages (and other languages are not used) could be a serious communication problem.

Replicability of the project.

The project is intended to improve EE in residential industrial and commercial equipment through standards and labeling programs. S&L of programs have already been successfully implemented in many industrialized countries, some developing countries (such as Mexico), and even in two of the countries object of the current project (South Korea and China). However, S&L programs are a continuing process, as standards are made progressively stricter, and both standards and labels cover an increasing number of energy consuming equipment. Thus the proposed project is already the replication of successful projects elsewhere. (There should be a greater emphasis on learning from this experience.) Moreover, the experience gained in the proposed project would be useful for future S&L programs in these countries as well as in other countries.

Sustainability of the project.

The project design appears to support sustainability. Standards and labeling programs, once established, are easy to maintain. Moreover, the proposed project includes components to promote future strengthening of the applicable standards. This would provide continuity and additional energy savings after the project financing ends.

SECONDARY ISSUES

Linkages to other focal areas.

The promotion of energy efficiency does not have a significant impact on other GEF focal areas.

Linkages to other programmes and action plans at the regional and sub regional levels.

The project itself is regional. Moreover, it was based on regional workshops covering other countries and groups in Eastern and South Asia. Furthermore, the results will be made available through APEC, including the use of the APEC website. This would thus permit additional visibility to the project, and facilitate replication beyond the immediate group of countries directly included in the project.

Other beneficial or damaging environmental effects.

To the extent that energy efficiency improvements will offset fossil fuels, there will be reduced air pollution emissions that would occur through the combustion of those fuels in generating electricity. Thus there are significant co-benefits to this type of project aimed at reducing GHG emissions.

Degree of involvement of stakeholders in the project.

The project design, including the PDF-A component, appears to have involved the appropriate stakeholders, so that these are likely to be actively involved in project implementation. This can be seen also from the very substantial co-financing of the project not only from in-country stakeholders, but also

from the International Copper Association. (Energy efficient motors require greater use of copper.) Note, further, that an earlier GEF project, Efficient Lighting Initiative, is being continued (with residual GEF funds as well as substantial additional support by the Chinese government) by an agency in China, so that this stakeholder is already involved in one end-use to be covered by the proposed project.

Capacity building aspects.

The project rightfully includes capacity building components. However, the successful implementation of S&L programs does not depend on human capacity building alone. For instance, it is very important that manufacturers and compliance agencies involved in S&L have access to testing laboratories in order to determine the energy and associated performance of the equipment object of the S&L programs. The Project Document mentions the need for testing laboratories, and suggests that host countries would need to provide resources for the design and construction of testing laboratories needed for the independent determination of the energy performance of the equipment involved. Given that GEF funds do not cover these expenses, an effort should be made to ensure that host countries are indeed able to finance these activities.

Innovativeness.

In the earlier years of GEF, when there were few successful projects, one sought innovative solutions to pressing problems. However, at this point in time, there is a large body of GEF experience, and it may be more important to draw and build on this experience rather than looking for further innovations, per se. Moreover, other GEF projects in other regions are also directed at standards and labeling strategies towards improved energy efficiency of energy consuming equipment. Last, but not least, there is a considerable body of successful experience in S&L in industrialized countries, and this can be drawn on for the successful implementation of this and other S&L GEF projects. The Project Document mentions this experience and the sources of information on this experience.

The Executive Summary makes reference to the Efficient Lighting Initiative (ELI) as an ES&L initiative. Note that only a small part of ELI was related to S&L.

Thus, while this project is not innovative, this is not considered to be a disadvantage.

Other observations and suggestions.

A number of other observations and suggestions have been market in the attached versions of the Executive Summary and the Project Document.

Responses to STAP Review Comments

Comments & Responses	Reference
KEY ISSUES	
Scientific and Technical Soundness of the Project	
Comment: *Note, however, that some of the BRESL countries already have S&L programs. It is not clear if these programs are successful, and at least one of the countries does not have an effective compliance regime. Thus, the proposed project should explicitly include an evaluation of previous efforts as well as the development of an effective compliance regime. This reviewer believes that such an activity could be added to, or included*	

Comments & Responses	Reference
within, the five program components (see, e.g. p. 17 of Exec. Summary). The evaluation should include actual equipment performance (see following paragraph). **Response**: The development of the BRESL project involved the conduct of evaluations of previous ES&L efforts and experiences in the region, in general, and in the participating countries, in particular. Such evaluations were based on data gathered through discussions with energy focal points of ASEAN countries and desk reviews during the concept stage of the BRESL, and from additional desk reviews during the PDF-A exercise and from the BRESL Survey. Based on these evaluations, the project proponents were able to get a clear understanding of the existing and persistent issues, problems/barriers, and constraints/limitations in the development and implementation of ES&L programs in the region and in the harmonization of energy efficiency standards and labels. These barriers are described in detail in Section I of the Project Document. Clear understanding of these barriers (including the policy/regulatory barrier of absence of an effective compliance regime) enabled the project proponents to design the interventions that will remove them. These previous, as well as ongoing and planned initiatives in the area of ES&L in the participating countries (hereinafter referred to as BRESL countries) are described in Part I Sec. I of the BRESL ProDoc. The BRESL project builds on these previous efforts and where applicable incorporates planned/programmed ES&L initiatives in each BRESL country and in the region among its baseline activities. To address the point raised by the reviewer, provisions for updating/expanding the evaluation of the ES&L efforts and experiences of each BRESL country in Activity 4.2 (Lessons Learned Reports) have been added. It should be noted that the evaluation of individual country ES&L program implementation performance is also part of the monitoring & evaluation activities of the project as carried out in each BRESL country.	ProDoc: Sec I, Part II, Activity 4.2 ProDoc: Sec IV; Part V; Table 25
Comment: *Note that "Means of Gauging Success" column of the Table in Annex B (Project Planning Matrix) of the Exec. Summary appears not to include any evaluation based on actual performance of the affected equipment. Nor is this included in Part V of the Project Document (Tables 23 and 24). The determination of the actual performance of equipment covered by standards or labeling should be an explicit part of the project, for the outcome to be meaningfully quantifiable.* **Response**: Both activities 1.2 (standards implementation) and 2.3 (national and regional testing and certification) include work on testing and certification of equipment to ensure that equipment sold really meets the standards. This includes round-robin testing to make sure that different test laboratories are obtaining the same results when testing the same piece of equipment. Additional texts were added in Tables 23 and 24 and to the Project Planning Matrix (Table 14) to reflect this. This comment could also be a request to test a sample of equipment in the field to verify that laboratory tests are reasonable. Such testing has only rarely been conducted in developed countries and is not possible within the very tight budget for this project.	ProDoc: Sec II, Part II, Table 14; Sec IV, Part V, Tables 23 and 24
Comment: *One of the five components refers to manufacturer support, described as "provision of information and technical assistance," (p. 17 of Exec. Summary). In order to produce*	

Comments & Responses	Reference
more efficient equipment, manufacturers are likely to require investment capital. If the proposed GEF project does not consider that such capital requirements and makes no provisions for it, manufacturers may end up being well informed but unable to manufacture more efficient equipment. This is likely to be especially severe in the poorer BRESL countries such as Bangladesh. The Project Document notes this need, and correctly makes special provisions to encourage financial institutions in Bangladesh to be involved in providing such funds. Moreover, this item should be included among the potential project risks. This reviewer has suggested a line to this effect in Table 22 of the Project Document. **Response**: Often the capital costs for more efficient equipment are less than manufacturers fear. This will be one of the items covered in Activity 3.2 (capacity building for manufacturers). That said, project proponents agree that a shortage of capital is a potential risk and we have made the suggested edit to Table 22.	ProDoc: Sec IV, Part IV, Table 22
Comment: *Another weak link appears to be the equipment sellers, especially for household equipment. … Some countries, e.g. Thailand, have achieved great success insofar as purchasers understand the energy labels. The training of equipment sellers for household equipment is therefore important and a separate component might be included in the project. The role of equipment sellers is particularly important for the success of labeling programs, where energy efficiency improvement depends on the purchasers' informed decisions.* **Response**: Several countries will be doing retailer outreach as part of activities that will be carried out under Component 5. However, additional outreach would be useful, and explicit references to this in Activities 1.2, 3.2, and 4.2 have been provided.	ProDoc: Sec I; Part II, Activities 1.2, 3.2, and 4.2
Comment: *If it is difficult, at this stage, to add more project components, this STAP reviewer strongly recommends that the items mentioned above be included within one or more of the existing five components.* **Response**: As noted above, these items have been added into the existing project components as suggested by the reviewer.	See individual comments
Comment: *Since the key barriers facing EE are common to many countries, as are the types of programs needed to reduce such barriers, including S&L, a single GEF project covering several Asian countries makes sense.* **Response**: The project proponents strongly agree with this comment, and believe that it is the underlying rationale for the importance of the BRESL project.	
Comment: ***Identification of Global Environmental Benefits**: It is not possible for this STAP reviewer to check all the emissions reductions estimates. The key assumptions (CO2 emissions factors for power generation in the target countries, and the potential for*	

Comments & Responses	Reference
energy efficiency improvement in the target equipment) appear to be reasonable. Note, however, that two slightly different values of expected emissions reductions over five years are quoted in Part III of the Project Document (highlighted in the text). **Response**: The CO2 emission reduction figures have been corrected. Correct numbers are emissions reductions of 24.2 million tons of CO_2 in Year 5 of the project, and a cumulative CO_2 reduction of 35.8 million tons.	ProDoc: Sec IV, Part III
Comment: ***Regional Context**: The project is regional in scope, involving seven large Asian countries. This allows for experience sharing through project development as well as the creation of common, regional policies to promote EE. Moreover, the project is integrated into APEC activities, including the use of an APEC website, allowing the project to be followed by other countries in the region. The fact that the seven countries use at least seven different official languages (and other languages are not used) could be a serious communication problem.* **Response**: English is the common language used in the APEC Energy Working Group and the sub-group, the APEC Expert Group on Energy Efficiency and Conservation (EGEE&C), where much of the collaboration on standards and labeling harmonization has taken place over the past eight years, including in development and updating of the APEC Energy Standards Information System (www.apec-esis.org). The energy experts in the various countries are able to communicate and share information on their various initiatives in English, in both formal and informal interactions. Language is not anticipated as being a serious problem in this project. However, this concern have been noted, and it may be necessary for China to allocate part of its baseline contributions for interpretation at meetings; for translation of BRESL project materials into Chinese; and also for translation of China ES&L materials into English.	
Comment: ***Replicability of the Project** … However, S&L programs are a continuing process, as standards are made progressively more strict (sic), and both standards and labels cover an increasing number of energy consuming equipment. Thus the proposed project is already the replication of successful projects elsewhere. (There should be a greater emphasis on learning from this experience.)* **Response**: Agree. Note that this is the intention of the lessons learned reports that will be prepared under Activity 4.2. To a great extent, the content and focus of the reports will depend upon the specific interests and demands of both the individual countries, and the Regional Project Management Unit. It is strongly believed that the "learning" will need to take place through the ongoing process of consultation, and note that this will happen at two levels: through the annual meetings of the Regional Project Steering Committee, and through the regular meetings of the Technical Working Groups of each of the selected products.	
SECONDARY ISSUES	
Comment: ***Capacity Building Aspects**: The project rightfully includes capacity building components. … The Project Document mentions the need for testing laboratories, and*	

Comments & Responses	Reference
suggests that host countries would need to provide resources for the design and construction of testing laboratories needed for the independent determination of the energy performance of the equipment involved. Given that GEF funds do not cover these expenses, an effort should be made to ensure that host countries are indeed able to finance these activities. **Response**: Two of the BRESL countries (China and Thailand), as well as Korea already have a full complement of test laboratories and regularly fund upgrades to these facilities. Malaysia has set aside funds to build a test laboratory, and such project to establish a test laboratory is among the baseline (i.e., co-financed) activities of BRESL. For the other three countries, project staff and consultants will not only provide technical guidance in establishing testing laboratory facilities but also regularly encourage host countries to finance these activities. In addition, the project will explore other routes to have equipment tested including use of privately owned laboratories (but subject to inspections and periodic round-robin testing) or use of laboratories in other countries (particularly useful when most units sold in a country are imported). For example, for many products, a substantial majority of equipment sold in Bangladesh comes from China and India (and to a lesser extent Korea and Thailand) and thus it may be possible to have many of these products tested in the country of origin. In this regard, the promotion of mutual recognition agreements (MRAs) will be an important part of Activity 4.3. This is clearly noted in the Project Planning Matrix (Table 14).	ProDoc: Sec I, Part II, Component 2; Activity 4.3.
Comment: ***Innovativeness****: The Executive Summary makes reference to the Efficient Lighting Initiative (ELI) as an ES&L initiative. Note that only a small part of ELI was related to S&L. Thus, while this project is not innovative, this is not considered to be a disadvantage.* **Response**: In fact, the Efficient Lighting Initiative is fundamentally an ES&L program, in that it includes a process for certifying and labeling efficient lighting products. The certification process includes energy performance testing by the ELI Quality Certification Institute. And the Institute then issues an endorsement label, indicating that the product in questions meets the efficiency and performance thresholds of ELI. Especially with respect to compact fluorescent lamps (CFLs), it is believed that the BRESL countries will get great benefit from drawing on the ELI experience and considering harmonization of their CFL specifications to the ELI specifications. Note that this has already been done in a *de facto* sense for recent CFL bulk procurements in Vietnam, and that Indonesia is currently considering a large-scale procurement of CFLs, using loan funds from the Asian Development Bank, and requiring that the CFLs meet the ELI specifications.	
OTHER OBSERVATIONS & SUGGESTIONS	
Executive Summary	
Comment: *Missing contact from South Korea* **Response**: South Korea (ROK) has decided that it will participate in the BRESL project not as a GEF recipient country, but as a project partner providing technical assistance.	

Comments & Responses	Reference
Comment: The MEPS lead to an immediate reduction in energy use of 4 to 30%, depending on the product - *It takes time for manufacturers to adapt to MEPS. Therefore, energy use reduction is immediate only after allowing for this adaptation period. Moreover the levels of reduction in energy use are only applicable to NEW EQUIPMENT manufactured according to the MEPS.* **Response**: This is a valid comment. The savings analysis assumes that MEPS will be announced after Year 2 and will take effect in Year 4. Paragraph 63 has been modified to reflect this. Please note that Paragraph 64, the analysis that will be carried out only models savings for new products being sold, i.e., it does not include efficiency improvements in the existing stock of equipment.	ProDoc: Paras 63 and 64
Comment: The difference between baseline and alternative electricity consumption does not translate to electricity savings attributed to BRESL, since electricity savings also include reductions from reduced purchases of incandescent lamps, and these are calculated at 2.75 times annual unit electricity consumption of CFLs. - *This is very important and should appear in the text, and not just in the small print!* **Response**: Paragraphs 64 and 65 have been added noting this aspect of the analysis. See also Assumptions (Paragraph 4) of the CO2 Emissions reduction Estimates (Sec. IV, Part III).	ProDoc: Paras 64 & 65; Sec IV, Part III.
Comment: Manufacturer Support Program - *Note that sellers of appliances also need to understand the benefits of energy-efficient appliances to their customers so that they may communicate such benefits in an effective manner. Thus it is imperative that this activity include retailers and not just manufacturers.* **Response**: This item is discussed above under the third key issue. Activity 3.2 has been broadened to include retailers and have also addressed this issue through expansions to Activities 1.2 and 4.2.	ProDoc: Activities 1.2 and 4.2
Comment: Regional Cooperation Program - *Besides cooperation among the countries within BRESL, the project should also build on experience in S&L programs in other countries, both industrialized as well as developing countries, including those supported through GEF projects.* **Response**: Agree. A new paragraph 93 has been added under Activity 4.3: Regional EE Standards and Labeling Network, calling on the GEF to "play an important role by creating a global ES&L network that will allow for the sharing of ES&L experience under the numerous GEF-assisted ES&L programs in the various geographic regions."	ProDoc: Activity 4.3, Para 93
Comment: There will be pilot activities that will be implemented on a demonstration basis by individual countries - *It is important that the selected countries are those with least progress in furthering S&L programs. That is, probably not South Korea, China, or*	

Comments & Responses	Reference
Thailand. **Response**: The project is a mix of regional and national activities, with each country selecting their national activities. All four of the BRESL countries with less developed ES&L programs will be doing pilot projects. In addition, Thailand will be doing a pilot project on government procurement and the one in China is on the development of an on-line database of efficient equipment. The Thai and Chinese pilot projects will advance ES&L progress in their countries.	ProDoc: Component 5; Paras 95 - 99
Comment: Component 1 indicators: 15% reduction in losses from new electric fans by Year 5 and 20% reduction in losses from rice cookers by Year 5 – *Are these reduction in losses, or reduction in overall consumption?* **Response**: In the case of these two products, it is reduction in overall electricity consumption. The wording on this item has been changed in the Project Document.	ProDoc: Sec II, Table 14
Note: All other suggested corrections (typographical and grammatical) in the Executive Summary are noted and have been addressed accordingly.	
Project Document	
Comment: Paragraph 28: For instance, Indonesia, which manufactures, and imports relatively few, refrigerators, still imports refrigerators from eleven Asian countries and exports refrigerators to these same eleven plus four other Asian countries. - *Something wrong with the writing here. As written it suggests that Indonesia neither manufactures nor imports many fridges.* **Response**: The statement has been revised to indicate that Indonesia manufactures refrigerators. The country imports refrigerators from 11 Asian countries, but also exports refrigerators to the same 11 Asian countries and 4 others.	ProDoc: Para 28
PART III: CO2 Emissions Reduction Estimates	
Comment: The implementation of ES&L initiatives catalyzed by the BRESL project will lead to 20.13 million tons of CO2 in Year 5 of the project, and a cumulative CO2 reduction of 29.68 million tons [Summary; 1st paragraph; 2nd to last sentence]. The estimated CO2 emissions reductions for this project are quite large – 24.2 MMT CO2/year in Year 5, and 35.8 cumulative MMT CO2 in Year 5 (2011) [Assumptions, 3rd paragraph; 1st sentence]. – *Values quoted are different.* **Response**: The error has been corrected. The correct numbers are 24.2 MMT CO2/year in Year 5, and 35.8 cumulative MMT CO2 in Year 5 (2011).	ProDoc: Sec IV, Part III
Comment: *The products don't emit CO2, rather the fuel burnt in power plants where the electricity is generated.* **Response**: Correct. Have reworded the text in the relevant paragraph (Sec IV, Part III,	ProDoc: Sec

Comments & Responses	Reference
Assumptions, 3rd Para)	IV, Part III
Part IV: Project Risks and Assumptions	
Comment: Investments for EE equipment/appliance retrofits may not be available- *The items covered in this S&L project are unitary equipment that would be replaced by efficient equipment, probably at the end of their useful life. They would not be retrofitted.* **Response**: This sentence was an error and has been deleted. Instead, a new sentence was added as suggested in the next comment.	ProDoc: Sec IV, Part IV
Comment: *Suggested Risk - Financing of investments for manufacturers to modify their production facilities may not be available.* **Response**: The suggested sentence has been added. This item is also discussed above under the third key issue.	ProDoc: Sec IV, Part IV
Note: All other suggested corrections (typographical and grammatical) in the Project Document are noted and have been addressed accordingly.	

c) **GEF Secretariat and Other Agencies' Comments and IA/ExA Response**

GEFSec Review 10 January 2007

The following are the responses to the additional comments of the GEFSec on the information in the BRESL Supplementary Annex. The other comments were already responded in 2005 during pipeline entry.

Comments & Responses	Reference
Comment: *When the concept was initially pipelined, there were 12 countries involved in this regional project. The current version indicates only 6 countries. Why are the other 6 countries dropped? So far, only Indonesia, China, and Pakistan have indicated that they will contribute their RAF allocations to this project. What's the status of buy-ins from other countries?* **Response**: The main reason why the other 7 countries have decided to withdraw their participation from the project is the limited GEF-4 climate change allocation that they got under the RAF. Three of them (Nepal, Republic of Korea & Sri Lanka) are among the "Group" countries, which don't have specific allocations. Three countries (Cambodia, Malaysia & Philippines) decided not to join because they have prioritized national projects instead of regional projects for their GEF-4 climate change portfolio. Pakistan initially intended not to join because it wants to prioritize national projects for its GEF-4 CC program. Later, it decided to join late in the project design (mid-February 2007) but can't be accommodated because of lack of data to work with. Although these countries are unfortunately constrained in joining this regional endeavor, they still consider the proposed project as important in supporting their national energy and sustainable	Letter of Endorsements (as per GEF-4 requirements)

Comments & Responses	Reference
development objectives. They have expressed their intentions to participate on their own in some of the regional activities during the course of implementation of the project. In the case of the Republic of Korea, they are still included in the project but not as a GEF beneficiary. They are part of the project as a provider of technical assistance. They will co-finance part of the technical capacity development activities of the project, bringing in their expertise in the area of ES&L. Australia has also indicated to provide technical assistance in the regional harmonization activities that will be carried out under the project. The LOEs from all 5 participating countries (i.e., BRESL countries) - Bangladesh, China, Indonesia, Thailand and Vietnam – are included as annexes to the BRESL Project Document.	
Comment: *GEF financing: Project 6m: management budget 1.5m; TA consultant budget: 2.51m. The management cost seems quite high, accounting for 25% of the total GEF funding. Furthermore, there is zero co-financing for project management cost.* **Response**: The budget table in the BRESL Project Document (*which has been prepared and as of 20 September 2006 ready for submission for the cancelled December Work program*) shows that overall, the GEF contribution of US$ 6.0 million is distributed as follows: 60% for national activities (in each BRESL country); 25% for regional activities (participated in by all BRESL countries); and, 15% for project management (US$ 900,000). The project management expenses include: (1) Regional PMU costs; (2) PMO costs in each BRESL countries; and, (3) Monitoring & Evaluation (including audit) costs. There are actually co-financing for project management. The amount varies for each BRESL country and ranges from 4.7% to 6.8% (in-kind and cash), or an overall average of 5.1%. Some mistakes (as compared to the budget table in the BRESL Project Document) were made during the preparation of the budget summary (Item 2) in the BRESL Supplementary Annex. These have now been corrected and revised to be consistent with that in the revised BRESL Project Document.	ProDoc: Sec. III (Total Budget & Work Plan) Supplementary Annex (Item 2)
Comment: *Timeframe: Preparation: 05/2006 to 10/2006; Implementation: 04/2007 to 03/2012. The timeframe for project preparation seems unrealistic. Does this mean the project has been fully prepared by now?* **Response**: The BRESL Project Document and Executive Summary were completed on 20 September 2006 and ready for submission for the December 2006 Work Program. However, the submission was put on hold following the decision of the GEFSec not to accept and process regional projects for the December 2006 Work Program.	
Comment: *Impact: The project claims to reduce 24m tons of CO2 by project end and 200m tons 10 years after the project, etc. These estimates, together with other expected outcomes; need to be substantiated, with clear, reasonable baselines and rigorous analysis.* **Response**:	

Comments & Responses	Reference
The estimation of the CO2 emission reduction that can be potentially influenced and realized through the interventions that will be carried out and the enabling environment (e.g., technical capacity improvement, policies and regulations concerning ES&L both at the regional and national levels) that will be created are summarized in Sec IV; Part III of the BRESL ProDoc. The information/data used were derived from the ES&L studies and the BRESL Survey that were carried out during the PDF-A exercise. These are summarized in Annexes C [Assumptions in Baseline and Alternative Scenario] and D [Overview of Project Impacts in terms of Energy Savings & CO2 Emission Reductions, by Country] of the BRESL ProDoc.	ProDoc: Sec. IV; Part III, pp. 79-83 Annex C - pp. 95-97 Annex D – pp. 98-100
Comment: *PM recommends the concept for re-pipelining, but Agency is requested to take the above issues into account.* **Response**: With the revisions incorporated in the ProDoc and Executive Summary, based on the responses to the GEFSec comments, it is hoped that the ProDoc will now be endorsed for inclusion in the June 2007 Work Program.	
Comment: *Please check and correct the ratification dates given in the table on p. 3.* **Response:** Based on the list of Status of Ratification of the UNFCCC (22 Nov 2006), the stated ratification dates of the BRESL countries are correct.	http://unfccc.int

GEFSec Review 09 April 2007 ***(including responses to comments on 19 April telecon)***

Comments & Responses	Reference
Country Eligibility	
Comment: The ratification dates provided are still incorrect. **Response**: The UNFCCC ratification dates of the BRESL countries have already been corrected.	Executive Summary, Page 3
Endorsement	
Comment: Endorsements are available from: China, September 12, 2006, $2m; Bangladesh, September 14, 2006, $1m; Indonesia, September 18, 2006, no amount? **Response**: The letter sent by the Indonesian GEF OFP to the GEF CEO on 15 September 2006 presents the list of endorsed projects from Indonesia, one of which is BRESL. The list indicates that US$ 1.8 M of Indonesia's GEF-4 CC allocation is earmarked for BRESL. Please see attached.	Indonesia GEF OFP LOE
Comment: Endorsements from Thailand and Vietnam are not attached.	

Comments & Responses	Reference
Response: The national GEF OFPs of Thailand and Vietnam signed their LOEs for BRESL on 11 April, and 25 April, respectively. Please see attached.	Thailand GEF OFP LOE; Vietnam GEF OFP LOE
Comment: Regarding Pakistan, it is puzzling that UNDP only learned about its intention to participate a few weeks ago and therefore wasn't able to include it in this regional project, when in fact Pakistan's OPF had endorsed this project with $0.5m RAF contribution back in September 2006. **Response**: Pakistan initially indicated in June 2006 that it will prioritize national projects for GEF-4. Later, they endorsed the project with US$ 0.5 M of their GEF-4 CC allocation. During the time of the PDF-A exercise, we were advised by the UNDP country office in Islamabad that the government is re-thinking its intention to support this regional project. We completed the BRESL design and prepared the BRESL ProDoc (for submission to the December Council WP, which was cancelled) in September 2006. After the country's GEF OFP's telecom with the GEFSec in January, UNDP-Islamabad informed us that the government is again interested in participating in BRESL and would like to increase its contribution to US$ 1.0 M. We requested for information that we can utilize for designing and costing the appropriate activities that will be carried out in-country, and for estimating the potential CO2 emission reductions that can be attributed to the BRESL activities in the country. Up until the week of 19 March, we haven't received the required information. UNDP-Pakistan was consulted again on 20 April regarding Pakistan's decision to join BRESL. UNDP-Pakistan said that the country is still interested and may also consider increasing their contribution to BRESL from their GEF-4 CC allocation to US$ 1.0M. Data gathering work will be carried out to come up with the design of the relevant activities and estimates for the potential energy savings and CO2 emission reductions that can be attributed from the BRESL activities in Pakistan. The identified activities commensurate to the final endorsed amount of contribution to BRESL will be reflected in the revised ProDoc that will be submitted for GEF CEO Endorsement.	
Comment: If the project still stands at $6m, what are the contributions from all **Response**: The total GEF contribution has been revised to US$ 6.8M to reflect the correct amount that Indonesia has earmarked for BRESL. The contribution of the BRESL countries are as follows: Bangladesh: US$ 1.0M; China: US$ 2.0M; Indonesia: US$ 1.8M; Thailand: US$ 1.0M; and, Vietnam: US$ 1.0M. In view of the increased contribution from Indonesia (based on the endorsed amount in the country's GEF OFP's LOE), the number of activities that will be carried out by Indonesia (national and regional) under BRESL have been adjusted to correspond to the US$ 1.8M endorsed amount for BRESL. UNDP-Jakarta advised that they think the implementing partner in Indonesia (i.e., DGEEU) would agree to increase the number of activities for the country under the project. Based on the information available from the	ProDoc: Sec II; Part I; Para 21 (Table 12A) ProDoc: Sec I; Part II; Paras 75, 77, 82, 84, 93, 99, 106 & 112

Comments & Responses	Reference
BRESL Survey in Indonesia, a proposed list of additional activities, and these (including their budget estimates) are already incorporated in the most recent version of the BRESL ProDoc. UNDP-Jakarta advised that in principle the proposed additional activities are acceptable to DGEEU since these are more or less the activities that DGEEU also suggested to address current issues on ES&L program development and implementation in Indonesia.	
Project Design	
Comment: The number of participating countries is down from 12 to 5. Discuss the implications. To what extent will the rationale for a regional project be undermined? What remedies can and will be taken? **Response**: The BRESL project still consists of countries that more or less represent the originally conceived combination of participants. It still have the countries that are considered well advanced in the area of ES&L (China and South Korea); countries that currently have fairly well developed ES&L programs for specific products (Thailand and Vietnam); and those whose ES&L efforts can be considered as still in the development stages (Bangladesh and Indonesia). In that regard, the original idea of south-south cooperation and transfer of knowledge/technology in the field of ES&L is still possible, albeit the coverage is smaller. All BRESL countries, particularly China, South Korea and Thailand, are also very keen in pursuing the development and implementation of regional harmonization, at least starting with the testing procedures. We believe that with the current combination of countries involved in BRESL, the regional aspiration to expand cooperation and sharing of information, and in particular, to develop and implement harmonized ES&L procedures is still achievable. This is because 2 of the BRESL countries (China and South Korea) are at the forefront of such regional aspiration. With China in the lead, the project can still facilitate regional cooperation among the BRESL countries laying the groundwork for eventual harmonization, or mutual recognition of energy standards & test procedures. In so doing, the overall effect of increased rate at which energy efficient products are developed by local manufacturers, recognized and supported by government policy, and purchased and used by consumers, can still be achieved. The following are the implications of a lower than expected number of participating countries in BRESL: 1. Lost opportunities for countries like Cambodia and Nepal, which are just starting to develop their ES&L initiatives, to benefit from the experiences that they can learn from the other BRESL countries; and from the additional technical assistance for capacity building on the development of ES&L programs. 2. Lost opportunities for countries like Malaysia, Pakistan and Sri Lanka to enhance their existing knowledge base and skills in the development and implementation of national ES&L programs, and to assist in their present plans to promote locally produced energy efficient appliances/equipment to other countries in the region. 3. Lost opportunities to tap on the experience countries like the Philippines, which has one of the oldest and most solidly established ES&L programs in Asia. Due to its constrained (due to limited GEF-4 CC allocation) participation in the BRESL, it also loss its opportunity to share its experiences on ES&L and to access technical	

Comments & Responses	Reference
assistance on better performing appliances in the more developed markets. Recognizing the importance of south-south cooperation and technology/knowledge transfer on energy efficiency within the region; the need to enhance awareness and the practice of energy conserving practices and energy efficiency technologies; and the fact that product markets are not defined by political boundaries, and energy using-appliances and equipment are traded freely between Asian countries, the project proponents have incorporated in the project supplementary activities that will later expand the harmonization effort initiated by BRESL. These activities will be led by China (also funded out of China's contribution to BRESL) and will be carried out at the regional level. These will involve the participation of other BRESL countries, as well as other Asian countries that will be invited to participate in the regional harmonization efforts. Actually, some of the originally proposed 12 countries have expressed interest in participating, on their own, in some of the regional activities of BRESL. These supplementary activities include: 1. Initial work on the development of proposed Harmonized Test Protocols, Certification, Accreditation and Compliance Regimes for 6 BRESL products (Activity 2.2) 2. Regional ES&L Harmonization Initiative - consists of specific tasks aimed at laying the groundwork for the facilitation of the planned regional ES&L harmonization starting with test procedures, and later on standards & labels (Activity 4.4). 3. Regional harmonization promotion, which will involved sub-activities such as: (1) Establishment of a Regional ES&L Harmonization Facility, which will serve as the main service platform for BRESL countries, and possibly other Asian countries in their individual and collective ES&L efforts; (2) Regional training workshops/programs in selected ES&L testing facilities on the development and implementation ES&L programs and testing protocols for the 6 BRESL products; and, (3) Piloting of developed harmonized ES&L test procedures and the application of ES&L tools. This is where the participation of other Asian countries in the BRESL's regional harmonization scheme will be ensured (Activity 5.5).	ProDoc: Sec I; Part II; Activity 2.2 (Para 82); Activity 4.4 (Para 101), Activity 5.5 (Para 114). See also Paras 84, 86, 87, 95, 97, 99, 100, 101, 102, and 103
Comment: Energy savings and CO2 estimation: Annex C provides assumptions for baseline and alternative scenarios; it needs to include data on the sale volumes of each product in each country for the baseline scenario. How robust are the sales increase assumption (5%p.a. for all products)? What are the past trends? **Response**: Annex C shows the volume of stock and sales of each BRESL product in 2004. Only the products that each BRESL country will work on under this regional project are shown. These data were used as baseline in estimating the anticipated energy consumptions and CO2 emissions under a business-as-usual scenario. These were also used in estimating the potential energy savings and corresponding CO2 emission reductions from the utilization of the improved and energy efficient versions of the 6 BRESL products under the alternative scenario, which the BRESL project aims to achieve. Annex E presents extracts from selected appliance market reports (Global Information, Inc., 2006) in the Asian region, particularly China and South Korea. According to these market reports, sales of domestic electrical appliances in South Korea in 2005 grew at a	ProDoc : Sec IV ; Annex C (Table 28) ProDoc: Sec IV; Annex E.

Comments & Responses	Reference
rate of 5%-8%. The same growth rate is expected to continue in the following years. The total white goods market in China grew by 61.81% between 1999 and 2005. This market is still expanding by about 8.21% per annum and is expected to continue until 2010. In terms of refrigeration equipment demand, it is reported that demand in the Asia/Pacific region will outpace the global average, rising nearly 6% annually through 2010. Based on the foregoing information, and the data gathered during the BRESL Survey regarding the growth expectations in the appliance market in the Asian countries, a modest average estimate of 5% annual growth rate for each of the 6 identified BRESL products in all BRESL countries was considered. This 5% across the board average annual growth rate was used as basis for forecasting market volume projections for, and the associated energy savings and CO2 emission reductions from the use of, the 6 EE products covered under the BRESL project. Moreover, the estimated 5% sales increases for the BRESL products is conservative, as the consumer appliances and equipment tend to increase at slightly higher rates as people purchase new appliances as their incomes rise. They vary by country, but typical historical rates of sales increase can be on the order of 5 to 15%, or even higher in some cases. In the likely case that sales volumes increase at a higher annual rate than 5%, the actual savings from BRESL will be even higher. In the unlikely event that sales volumes for the covered products increase at an average annual rate of less than 5%, the actual savings achieved from BRESL would be slightly lower.	
Comment: It is difficult (in fact impossible without more detailed information) to understand/verify the data in Annex D. Please indicate at least which products are included for which country. **Response**: Annex C shows the volume of stock and sales of each BRESL product in 2004. These data were used as baseline in estimating the anticipated energy consumptions and CO2 emissions under a business-as-usual scenario, and in estimating the potential energy savings and corresponding CO2 emission reductions from the utilization of the improved and energy efficient versions of the 6 BRESL products under the alternative scenario, which the BRESL project aims to achieve. The CO2 emission reductions for each country are based on the EE products that each country has expressed and agreed to work on under the BRESL project. The countries participating in the various BRESL products are as follows: • Refrigerators: Indonesia, Korea, Thailand, Vietnam • Room air conditioners: Bangladesh, China, Indonesia, Korea, Thailand, Vietnam • Electric motors: Bangladesh, Indonesia, Korea, Thailand, Vietnam • Ballasts for FTLs: Bangladesh, China, Indonesia, Thailand, Vietnam • Electric fans: Bangladesh, China, Indonesia, Thailand, Vietnam • CFLs: Bangladesh, China, Indonesia, Korea, Thailand, Vietnam • Rice cookers: Bangladesh, Indonesia, Korea	ProDoc: Sec IV; Annex C (Table 28) ProDoc: Sec I; Part II, Table 8
Comment: Component 1 (along with component 2) focuses on policy and regulations. It is well known that the key to effective policies and regulations rests with enforcement. The	

Comments & Responses	Reference
proposed activities are somewhat vague and inadequate in addressing enforcement issues. Please elaborate. In this context, explain "The MEPS lead to an immediate reduction in energy use of 4 to 30%, depending on the product."	
Response: Component 1 focuses on establishing the legal and regulatory foundation for ES&L, thus providing a conducive and enabling environment for the development and application of related performance standards and labeling programs. Enforcement of such enabling regulations is an important issue, and in that regard, specific activities that will ensure not only of the enactment of the legislation and implementation of legal frameworks (rules & regulations) on ES&L but also their strict and proper enforcement, have been included. These are: 1. Creation and operationalization of an ES&L Inter-Agency Committee in each country – this is to facilitate the enactment of the ES&L legislations, whose members are from the various key stakeholders/players in the area of ES&L. This Committee will regularly coordinate and report on ES&L policy issues related broadly to policies within the country's energy, industry and financial sectors, and is tasked primarily with the monitoring of impacts of policy implementation and coordinates the revision and improvement of policies as necessary in accordance with the sustainable energy goals/objectives of the country. It will help ensure that proper enforcement of ES&L policies and programs are carried out, by acting as the ES&L "watch dog", monitoring the administrative, regulatory and legal aspects of the national ES&L program implementation. 2. Technical advice in the review of, and formulation of relevant recommendations to a proposed ES&L legislation and its implementing rules and regulations. 3. Relevant information on all specific actions that were successfully implemented in other countries that ensured the strict and proper enforcement of the ES&L policies and associated legislation and legal framework will be shared to each BRESL country. Technical assistance will be provided to each country in at least piloting the successful enforcement procedures. Other proven successful measures (e.g., "manufacturers challenge") in countries in other regions to enforce ES&L programs will also be evaluated, possibly modified to fit each country's circumstances, and piloted to further enhance the project implementation. Apart from the abovementioned interventions, it is viewed that the enforcement issue is implicit in the objectives of Components 1 and 2. It was the consensus of the BRESL design team that each country can come up with the appropriate enforcement measures while implementing Activities 1.1, 1.2 and 2.1, to ensure that the outputs from these activities (e.g., policies, laws, IRRs, standards and labels) are enforced during and after the BRESL project. Nonetheless, we'll try to get the countries suggest something on the of enforcement of policies and regulations to get further ideas on other specific activities on these, which can be mentioned in the final version of the BRESL ProDoc by the time of CEO Endorsement.	ProDoc: Sec I; Part II; Paras 75, 77, 80, and 82. See also footnotes.
With regard to the phrase "reduction of 4 to 30%", this refers to the impact of MEPS once after it is announced and implemented. Because the manufacturers know that they could receive a penalty, or their product could be banned, if it does not meet the new	ProDoc : Sec I ; Part II ; Para 63 (footnote)

Comments & Responses	Reference
performance standards, they (at least the international and higher-quality domestic suppliers will shift their product mix toward more efficient models in order to meet the MEPS. The range varies depending on the technical characteristics and ease of efficiency improvements for any one product. For example, a CFL would only experience a small increase in efficiency, and the greatest impact would be on its light quality and lifetime; whereas an air conditioner or refrigerator could see a relatively much larger increase in efficiency. The proposed specific activities that are intended to facilitate the enforcement of ES&L laws, rules and regulations such as MEPS will ensure the realization of the estimated level of energy savings attributable to strict compliance. (Activities 1.1 & 1.2)	
Comment: The key rationale behind a regional project is to achieve regional harmonization. It is difficult to see how this can be achieved through this project. Even the regional cooperation component does not touch on this. Only activity 5.4 mentions this (under China). What's the amount of resources (GEF and other) will go to this? **Response**: Regional harmonization will result from regional cooperation and build up of mutual trust between the participating countries and organizations. While harmonization is intended from the onset of the project, such harmonization will only materialize, when the participating countries have set-up comparable ES&L systems. It is important to take note of the fact that the project intends to harmonize national regulative, standards setting and compliance regimes. Individual countries technical specification, particularly Minimum Performance Standards will still respond to the local market demand. There is however scope of harmonizing test procedures and the technical specifications for High Energy Performance Standards. These are mostly addressed in Component 4 which is comprised of activities that will aid individual countries with development and implementation of their ES&L programs and that will take important steps towards regional harmonization of standards and labels. In the response to an earlier comment on regional harmonization (see above previous comment), it was mentioned that there are several activities in Components 2, 4 and 5 that addresses the regional harmonization objectives of the BRESL Project. These are described in the revised ProDoc. Activity 2.2: • Development of a body of common information and approaches each country can use to set standards and labels, making adoption easier in individual countries and also bringing a degree of harmonization to standards and labels in the region. • China and Indonesia will carry out initial work on the development of proposed Harmonized Test Protocols, Certification, Accreditation and Compliance Regimes for 6 BRESL products. Activity 2.3 • Evaluation of opportunities to use test facilities in one country to help serve testing needs in other countries • Initial work to harmonize test procedures and establish mutual-recognition agreements and posting of certification data. Activity 2.4	ProDoc: Sec I; Part II Paras 82-83 Paras 84-85 Paras 86-87

Comments & Responses	Reference
• TA on the development of a simple model data collection and reporting procedures, based on successful efforts in the region. This activity will be in line with the data banking requirements needed to support the regional harmonization efforts. Activity 4.1 • Development of a project web portal to accommodate, among others, information intake and dissemination related to the harmonization work that will be carried out. Activity 4.2 • Preparation of a series of "lessons learned" reports on ES&L issues in each country, which include those relating to work done in-country and collectively in the region on the harmonization efforts. • Analysis of ES&L harmonization efforts in each country, the results of which will be used in aligning or if necessary, redirecting the collective efforts to achieve the regional ES&L harmonization objectives. Activity 4.3 • Development of a regional ES&L Network to, among others, facilitate more information uptake that will be useful in guiding the collective work for on ES&L harmonization, starting with the test procedures. • Regional ES&L Information Sharing Network – to facilitate the gathering and consolidation of information to be uploaded in the project web site, e.g., conference announcements and papers, journal articles, media communications, success stories, best practices, etc. Activity 4.4 • Regional ES&L Harmonization Initiative - This major activity consists of specific tasks aimed at laying the groundwork for the facilitation of the planned regional ES&L harmonization starting with test procedures, and later on standards & labels. Activity 4.5 • Sustainable Follow-up Plan – This are for activities that will be carried out to ensure key regional activities and frameworks that were established under BRESL can continue. Activity 5.5: • Regional Harmonization Promotion (China) – Includes (1) Establishment of a Regional ES&L Harmonization Facility; (2) Regional training workshops/programs in selected ES&L testing facilities on the development and implementation ES&L programs and testing protocols for the 6 BRESL products; and, (3) Piloting of developed harmonized ES&L test procedures and the application of ES&L tools.	Para 95 Para 97 Paras 99-100 Paras 101-102 Para 103 Para 112
Comment: For management arrangement, China's NDRC is the executing agency and CSC "Designated Implementing Agency." However, on the cover page, "None" is given. **Response**: China's NDRC is the executing agency and CSC is the designated implementing agency, on behalf of NDRC. These information have already been reflected at the front cover of the Executive Summary	Executive Summary, p. 1
Monitoring & Evaluation	
Comment: What is the baseline for the 6 products in each of the participating countries? What is the market share of efficient projects? Without baseline information, the target of increasing market share of efficient products by 25% in yr 5 relative to baseline is not very meaningful (same is true of the specific targets under component 1).	

Comments & Responses	Reference
Response: Reliable data on EE product market shares are currently not available. Most of the data available are just estimates. This was also the finding from the BRESL Survey. The 25% increase is based on the opinion given by stakeholders and people who were consulted during the BRESL Survey, and to some extent based also on the 5% per annum assumption that was used in estimating the potential energy savings (and CO2 emissions reduction) that can be attributed from the utilization of EE products. This was taken as the basis for the activities that will be carried out under the project, i.e., to come up with the relevant interventions that can influence and/or bring about improvement in the use of EE products in the BRESL countries. Activity 2.4, which is intended for strengthening the data collection and reporting procedures on equipment availability and sales in the BRESL countries, will set the baseline the realistic market share of EE products in each BRESL country.	ProDoc: Sec I, Part II; Para 88; Sec IV, Annex E
Comment: Overall the indicators and targets are quite good. A few seem inadequate or not so meaningful, e.g., 5 manufacturers develop new efficient products: What does this mean relative to the size of the market and thousands of manufacturers? Percentage of manufacturers involved in project who agree that ES&L can provide opportunities to increase profitability: so what? **Response**: Bulk of the expected energy savings that will result in the utilization of EE products (at least the 6 BRESL products) is derived from replications of what will be achieved in the project. Among the tangible outcomes of the project is manifested by the local manufacturers that will develop and manufacture EE products. The number of manufacturers mentioned as indicator corresponds to the number of manufacturers that the project will directly worked with. It's an output indicator – showing the direct output of a specific activity carried out under BRESL. This has been revised to show 60, which is based on at least 10 manufacturers per country, i.e., 2 to 3 per BRESL product covered in each country. Regarding the indicator *Percentage of manufacturers involved in project who agree that ES&L can provide opportunities to increase profitability* - this is to present the impact of the advocacy work that will be carried out to encourage local manufacturers to venture in or invest in the manufacture and sale of EE products. This has been revised to read *Percentage of manufacturers that plan to locally produce EE products.*	ProDoc: Sec IV, Part V, Table 23 Sec I; Part II, Para 92
Financing	
Comment: GEF: 6m; Govts: 23.65m; EF: 0.75m; ICA: 2.9m; CFL Harmo Initiative: 0.2m; CLASP: 0.16m; Total: 6+27.66m. Specify cash vs. in-kind from each co-financing source. **Response**: The total budget has been revised to US$ 6.8M, reflecting the additional US$ 0.8 M contribution of Indonesia to BRESL from their GEF-4 CC allocation. All other funds remain the same. Table 4d in the Executive Summary and Table 12C in the ProDoc have been revised to clearly state how much is cash and how much is in-kind from each co-financing source.	Executive Summary: Page 1; Table 4d; ProDoc: Sec II, Part I, Table 13C

Comments & Responses	Reference
However, for those co-financers that will confirm their commitments by the time BRESL is up for CEO approval, the cash & in-kind amounts are still combined.	
Comment: According to the letter from CLASP, the co-financing amount is 5k, not 160k. The latter figure is what was spent last year by CLASP. **Response**: This mistake is already rectified in the BRESL ProDoc and Executive Summary. CLASP is only committing US$ 5,000 co-financing for BRESL. The US$ 160,000 (or more) has been clarified to us as some sort of leverage co-financing. It's not included in the BRESL Financing Plan.	ProDoc: Sec II, Part I, Para 33 & Table 13C
Comment: Is ICA in a position to commit $2.9m cash to the project? Does the person who signed the letter have the legal authority to do so? (The letter was not even written on ICA stationary.) **Response**: ICA has a 5-year program in the region, which involve mainly capacity building and technical assistance to manufacturers in the development of MEPS and labeling schemes for various products such as air conditioners, ballasts and motors. ICA agreed to subsume their program into BRESL. Such program The US$ 2.9 M in-kind co-financing is their allocated budget for that program which starts this year. Mr. Zhou is ICA's Global Team Leader for Sustainable Electrical Energy, and as such is authorized to sign on behalf of his organization their US$ 2.9 M cash co-financing for BRESL. Please see attached co-financing letter written on an ICA letterhead.	ProDoc: Sec II; Part I; Para 30 ProDoc: Sec IV; Part A (separate attachment)
Comment: Co-financing is said to have been confirmed by the governments of Bangladesh and China. But there are no letters. Final co-financing letters from governments as well as other sources will be required for CEO endorsement. **Response**: Some of the co-financing letters are already available, and will be provided soon. All of the co-financing letters will be available for submission to GEFSec when BRESL is already up for GEF CEO approval.	ProDoc: Sec IV; Part A (separate attachment)
Comment: Some endorsement letters indicating participating countries' contribution to the project are missing: Thailand, Vietnam, and Indonesia (amount). **Response**: The letters from the GEF OFPs of Thailand and Indonesia endorsing the BRESL Project are attached. Each letter indicates the amount of funds from each country's GEF-4 CC allocation that will be contributed to BRESL. The LOE from Vietnam will be sent by 23 April according to the country's GEF OFP.	ProDoc: Sec IV; Part A (separate attachment)
Responses to Reviews (Other IAs and RDBs)	
Comment: Response is needed to comments by other agencies. **Response:**	

Comments & Responses	Reference
Please find table below summarizing the responses to the comments of UNEP on the BRESL Project.	

Responses to UNEP Comments

Comment & Response	Reference
Comment: 1) The rationale for a regional approach is unclear, particularly given the fact that not all the selected countries are at the same level on this field. Reasons given in terms of regional harmonization and facilitation of regional trade are too broad and vague and should have referred to a clear analysis of the regional market for each of the targeted equipment. The fact that not all the countries will have an action directed to all the selected equipment also contradicts this large approach encompassing six countries (note by the way, that South Korea is not indicated as a participating country in the front page of the Executive Summary). **Response:** Countries in the Asian region recognize that ES&L programs can help realize significant energy saving potentials. Given the high amount of expertise that is necessary to develop and ES&L program, Asian countries could benefit a great deal from a regional program that stresses capacity building and informational exchange on ES&L. Such a program would allow for the rapid dissemination of best practices in the area of implementation models, financing, successful demonstration programs, and labeling. Product markets are not defined by political boundaries. Energy using appliances and equipment are traded freely between Asian countries. The development of individual standards and labeling programs without open dialog and cooperation on the establishment of testing procedures and label design could be ultimately be economically harmful to product manufacturers. For example, any effective regime for energy standards and labeling will have to include imported as well as locally produced products. The process of translating standards on imported products must account not only for different measurements but also for different philosophical underpinnings of testing design. This process is expensive, time consuming, and often inaccurate. Regional cooperation in the development of programs can eliminate this problem. Additionally the development of testing facilities, testing protocols, monitoring and compliance regimes across boarders can bring down costs through scale. This would be highly beneficial, especially to countries with smaller product markets to which the costs of developing ES&L programs are comparatively high. Scarce national program and budget resources for testing and certification can be shared via such a cooperation program (e.g., mutual recognition agreements) and need not to be built up in parallel within all participating countries. The building of such competence centers in all the participating countries will eventually lead to under utilization of such resources and hence strongly compromise such institutions sustainability. The basic rationale for a regional approach is that the project addresses traded products that are commonly traded and sold between the traded countries. As such, the current "each country is an island" strategy is not an appropriate way to deal with measuring	

Comment & Response	Reference
and rating the energy performance of the traded products. The proposal recognizes that not all of the participating countries are at the same level of advancement, and actually takes advantage of this fact. The proposed program advocates a strong component of regional exchange and cooperation, fostering regional capacity building, experience exchange, built up of mutual trust for future harmonization and technical co-operation. Overall this approach shall lead to a reduction of market barriers in the region enabling economics of scale for manufacturers' and finally more affordable pricing for energy efficient products. The project also recognizes the diversity of the different countries, and therefore rather than propose a "one size fits all" strategy where all countries have to work together on all products, the countries will focus on products where they have the greatest need, or have experience to share with the other countries. This market oriented specialization will increase the efficiency of use of the GEF resources. The 6 BRESL products were identified by the project stakeholders based on the survey that was participated in by several Asian countries. These products are among the commonly traded appliances/equipment in the region. For example, the estimated saturation rates for refrigerators, air conditioners and rice cookers indicate that these are commonly used in many of the BRESL countries. Presently, ES&L programs are developing at different rates and with different results across Asia. Without systemized regional cooperation, the programs will continue to develop in this manner without the gains of exchange of both technical and human capital. Without cooperation, facilitated also through south-south dialogs, progress of ES&L programs will not only be slowed, but it will happen in such a way that it could potentially hinder trade once the programs are matured. Cooperation in the testing and marketing of each of the identified 6 BRESL products will yield the benefits of greater market transparency, reduced costs for M&E and product testing, and enhanced prospects for trade and technology transfer. South Korea is part of the project as a provider of technical assistance, not as a GEF beneficiary. Since they have the most extensive, advanced, and successful standards and labeling program in the region, their in-kind contributions and participation in the project will be immensely valuable	ProDoc: Sec I; Part I; Para 41 (Table 4)
Comment: 2) As indicated in the ProDoc, some of the countries are well advanced in developing EESL (China, South Korea, Thailand) and it is questionable they still need GEF support. These countries have already benefited from international programs developed by the IEA, the United Nations Foundation through CLASP, and others, including the GEF: there was already for instance, a UNDP led GEF project on refrigerators and lighting in China a few years ago; similarly, there was a GEF project on air conditioners in Thailand. Although the role of CLASP or other organizations is well mentioned, it is unclear how they will be involved or how this project will build on what has already been done. **Response:** Table 3 in the ProDoc summarizes the ongoing and planned cooperation efforts for regional initiatives on ES&L. The projects include both GEF projects and a range of	ProDoc: Sec I; Part I; Para 39

Comment & Response	Reference
other donor-funded projects. While many of these initiatives are in-country efforts to develop standards for specific projects, none of the current or ongoing efforts takes the regional approach that BRESL will take to facilitate regional cooperation, harmonization, and actual implementation, of energy labeling and MEPS for a set of core energy-using appliances and products. Capacity built from the projects that were mentioned has facilitated the development and implementation, but at variance from each other, of ES&L programs at the national level. Despite the regional cooperation efforts that were done in the past, such national programs nearly entirely didn't provide the benefit of exchange of both technical and human capital with other countries in the region. The national activities that were identified for each country are meant to expand existing and planned ES&L activities, and to remove barriers hindering the effective development and implementation of ES&L programs. These are the incremental activities that will either: (1) improve the outputs and impacts of the existing and/or planned ES&L activities; or, (2) facilitate the smooth and effective implementation of the existing and/or planned ES&L initiatives. Paragraphs 43, 44, 46, 47 and 48 explains why each BRESL country need the incremental assistance from GEF for their expanded/improved ES&L initiatives. In this project, South Korea is not requesting for GEF assistance. Rather, it will be providing technical assistance to the project. With regard to the advanced status of some of the countries – take the case of Thailand. The BRESL Survey revealed that Thailand is advanced only in energy labeling, and even its labeling programs are limited to the extent that they are not mandatory like the other countries. And unlike Korea and China, which have mandatory minimum energy performance standards (MEPS) for many products, Thailand as of December 2006 had passed only one MEPS for any product, air conditioners. Now, the Thai Government has made standards and labeling a priority and it is likely that Thailand will benefit greatly from the BRESL cooperation as it develops MEPS for several products during the five year BRESL project cycle. With regard to the previous GEF project related to air conditioners, there have been two GEF projects: one very successful project helped build capacity during the initial start-up of the Demand Side Management (DSM) Office of the Electricity Generating Authority of Thailand. This resulted in a successful energy labeling program covering refrigerators and split-system air conditioners. However, the labeling scheme is somewhat limited as it is not mandatory for all air conditioners. A second GEF project was focused on chiller replacements, and is not relevant to the types of split-system (i.e. residential and small commercial) air conditioners covered under the BRESL project. Here is how the BRESL build on previous ES&L efforts in the region: • United Nations Foundation through CLASP – Capacity built in each country will most likely be utilized in the implementation of specific activities of BRESL • UNDP-GEF CFC-free Refrigerators Project – China will provide capacity building on ES&L in refrigerators to the other BRESL countries (in line with the South-South cooperation theme). • UNDP-GEF Greenlights Project - China will provide capacity building on ES&L in lighting products to the other BRESL countries (in line with the South-South cooperation theme). Along with the IFC/GEF ELI Project, experience from the	(Table 3) ProDoc: Paras: 43, 44, 46, 47, 48

Comment & Response	Reference
Greenlights project will be used in the regional harmonization efforts for lighting products. • CLASP and other organizations – These are mostly active in ES&L capacity building in the region, and will be providing in-kind technical assistance support for the ES&L policymaking and regional cooperation programs of the BRESL project. Partnering with these organizations will broaden the reach and impact of the BRESL project. CLASP will support the project as a resource partner, providing intellectual and technical resources. Via this involvement of CLASP the project will naturally build on what has been implemented and achieved elsewhere where CLASP has worked.	
Comment: 3) The relevance of including CFLs in the list of targeted products is questionable. Since China has almost the production monopoly of CFLs and a lot of work has been done already regarding the development of EESL in this area, one can wonder whether the topic should not be dealt with at international level, in order to harmonize the various existing standards. As far as the countries in the project are concerned, the issue becomes more how to introduce the CFL technology and phase out the incandescent lamps, which is a governmental issue. **Response:** The choice of EE products (i.e., BRESL products) was based on the project proponents and stakeholders. A survey was conducted to determine these, and a stakeholder's consultation meeting confirmed these choices. One of the selected products is CFL. It is true that China now produces approximately 90% of CFL sold globally. However, several countries such as India, Indonesia, and Vietnam are working to maintain and even expand their CFL production base in order to have more control over the energy-efficient lighting equipment sold in their countries. And China also recognizes its particular responsibility for ensuring CFL quality because its suppliers product many of the best CFLs in the world, but also many of the worst, which do not meet quality standards. Therefore, Chinese government and industry have expressed string interest to further and develop and harmonize standards, test protocols, and compliance regime to allow for a more enthusiastic CFL uptake on regional markets, which have in some cases been hampered by customers having negative experience with some under-performing CFLs. The harmonization of existing testing procedures and performance specifications for CFLs is currently being led by the International CFL Harmonization Initiative (CFLI). So far a revised Test Protocol – as indispensable component of CFL Performance Standard Harmonization – has been agreed upon and has been proposed to the IEC. However, there is no agreement on a common set of performance and quality specifications for CFLs, and this will not be undertaken by the IEC. At a recent CFLI stakeholder meeting in Xiamen, China during 2-3 April 2007, no common position could be found. In fact, the BRESL project is complementary to the CFLI, since the CFLI simply provides a regular venue (approximately twice a year) to discuss and agree on proposals for harmonizing test procedures, performance specifications, mutual recognition and certification, etc. But CFLI has no direct link to implementation in any country and	

Comment & Response	Reference
cannot therefore by itself develop agreements that lead to in-country implementation. This is where BRESL can leverage the groundwork carried out by CFLI. Apart from this principal standardization issue, much work remains to be done to develop an adequate compliance regime to ensure that CFLs manufactured, traded, and sold in the region meet basic quality standards. In fact the current trend by governments to announce phase-outs of incandescent lamps makes the CFL component of BRESL even more relevant. The politicians, by supporting such bold declarations, now need to ensure that the CFLs that are sold to replace the incandescent lamps meet basic standards for quality, performance, and energy efficiency. Therefore the BRESL project, by providing a mechanism for the participating countries to harmonize their CFL specifications will ensure that this progress further.	
Comment: 4) The elaboration of standards and labels requires a strong partnership and sometimes lengthy and complicated negotiations with the manufacturers and/or local equipment suppliers and distributors. Although technical assistance directed to these stakeholders is indicated among the various activities, the TA content is not explicitly described and the support to these negotiations does not appear as a key objective. Surprisingly, manufacturers or equipment distributors do not even appear in the list of stakeholders. **Response:** We recognize this comment as a substantial contribution to our proposal. From the position of the project proponents stakeholders like manufacturers, equipment distributors and customers would be involved implicitly in the project on a regular and ongoing base via national standardization bodies, institutes, associations, and government departments etc., which as part of their regular work and project actions in their respective countries will discuss and consult with relevant stakeholders of their constituencies. This is already included in the Project Strategy, where capacity building, manufacturer support, pilot projects constitute a forum for interaction with these relevant stakeholders. However, responding to this comment, the project proponents wish to emphasize role and involvement of the stakeholders, which include the local manufacturers. Partnership will explicitly include cooperation with the relevant stakeholders and market actors in the project. Component 3 of BRESL specifically address the barrier that manufacturers are often distrustful of standards and labels, and their objections can delay ES&L efforts or result in weakening of standards. While it is acknowledged that this manufacturer-related barrier is generic across the region, it must be dealt with in the context of each national economic and cultural setting. The activities under this project component are meant to get the interest and cooperation of local manufacturers to participate in ES&L programs, and ultimately build their confidence in venturing in the manufacture of EE products. It is comprised of promotional/advocacy initiatives, provision of information to manufacturers on ways to improve product efficiency at modest cost; training on ways to use ES&L programs to increase profitability; and technical assistance to individual local manufacturers on ES&L issues, particularly compliance to set standards. Local manufacturers will be consulted and involved in during the standard and label	ProDoc: Sec I; Part II; Paras 83-88 ProDoc: Sec I, Part V; and Sec IV, Part II (Table 16) ProDoc: Sec I; Part II; Paras 83-88

Comment & Response	Reference
development processes. Workshops will be organized for them to participate in the development and review of proposed standards, and will also discuss marketing strategies to use ES&L efforts to "up sell" to higher value, higher profit products. To enhance their interest in the program, limited amount of technical assistance to selected manufacturers as identified by host countries will be provided, consisting of plant walkthroughs to evaluate the existing manufacturing operations and processes, meetings, and provision of technical recommendations on the upgrades. While it is not mentioned in the proposal, getting the local manufacturers' cooperation and negotiating terms of the partnership with them, are very important "must do" activities. Obviously, these are the things that need to be done in establishing partnership with them in the implementation of the project activities that will involve them, such as the development of a voluntary agreement schemes.	
Comment: 5) It is difficult to understand why there is a need for such a huge budget, essentially used for local or international consultants. The exact roles or terms of reference, staff weeks, skills and required qualifications of these consultants are not provided (although this is explicitly requested p.11 of the Executive Summary) which makes it difficult to judge the financing soundness of the project, which overall budget seems however overestimated. **Response:** The stakeholders from each BRESL country identified their national activities, and at the same time, provided inputs regarding the regional activities that will be carried out collectively by all countries under BRESL. Since they understand exactly what these activities are all about, and what sort of expertise and logistical requirements are needed, they are in the best position to estimate the number of personnel, level of expertise and staff-week that are required for each activity. The weekly rates that were used for each type of personnel required are more or less based on typical consultancy rates in their respective countries, and international rates used in other similar projects. Compared to many other GEF projects, and given the technical and geographic scope of the project, the budget does not appear to be excessive. The project aims to influence the development of standards and labeling regimes for six product types across six countries. The substantive technical work involved for each product involves a range of steps including assessment and improvements in the regulatory frameworks, assessment and harmonization of testing protocols, analysis and development of minimum energy performance standards (MEPS) and high energy performance standards (HEPS). This complex and comprehensive approach requires substantial consultancy input over a wide range of diverse issues. Hence, the budget - mainly to be utilized for international, regional and national consultants, regional experience exchange and pilot projects - reflects essentially the complexity of the project's scope and approach. The project partners believe the amount is justified by enabling the project delivering the proposed outputs in high quality and on-time. To support the assertion that the BRESL budget is not excessive, one can compare it to some other related GEF-funded projects. By contrast, the GEF support for the WB Thailand DSM effort during the late 1990s covered just six products in a single country, and the total GEF funding was US$ 15.5 million. And GEF support for the IFC Efficient	

Comment & Response	Reference
Lighting Initiative (ELI) only covered one end use (lighting) across seven countries. As to the financial soundness of the project, the combined national and regional approach to addressing the barriers to the development and implementation of ES&L programs in the region proves to be more cost-effective compared to an individual country approach. Considering the projected CO2 emissions reduction that will result directly and indirectly from BRESL, the estimated unit abatement cost is about US$ 0.17/ton CO2. This corresponds only to the direct CO2 emission reductions during the 5 year project duration (i.e., 2007-2011). Please note that, as per usual GEF procedures, clearly defined TORs for each major key project players will be provided by the time the BRESL ProDoc is already up for CEO approval.	ProDoc: Sec IV; Part III