

# **Vietnam Energy Efficiency Standards and Labelling Program: Australian Government support project**

# **Inception Report**

January 2012



•Reducing our carbon pollution•Preparing for climate change•Helping to shape a global solution•

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### 1. Summary

The Government of Vietnam has introduced legislation to implement Minimum Energy Performance Standards (MEPS) for appliances and equipment alongside a program of Energy Labelling. The Australian Government Department of Climate Change and Energy Efficiency (DCCEE) has extensive experience in this area and is providing assistance through the Vietnam Energy Efficiency Standards and Labelling (VEESL) Program, funded by the Australian Agency for International Development (AusAID).

The aim of the VEESL Program is to improve prosperity in Vietnam while increasing energy security and reducing carbon emissions. This will be achieved through a range of activities designed to build sustainable capacity within Vietnam to set and enforce standards, test appliances and monitor and evaluate the MEPS and Labelling program.

The key elements are to:

- fund an expert role in the Ministry of Industry and Trade (MOIT) to assist in program implementation;
- work with the Vietnam Standards and Quality Institute (VSQI) to provide information on international standards; review and contribute to standards as they are developed and support international consultation. The work will ensure that test and performance standards are consistent with international best practice and appropriate to local circumstances;
- contribute to the design and implementation of the online registration system and providing resources to assist in the processing of applications;
- work with MOIT and the regional DOITs to develop a robust enforcement regime consisting of compliance surveys and verification testing. Helping to facilitate compliance and establish relevant enforcement policies, procedures and staff manuals;
- support the development of local test capacity and technical and commercial skills in laboratories through training, local and international round robin testing and, potentially (if required), providing grant support for capital equipment;
- assist in the development of initiatives to communicate the MEPS and Labelling Program to manufacturers, installers, retailers and consumers;
- establish modelling, research and evaluation activities to identify the financial, energy and carbon savings resulting from the MEPS and Labelling Program; and
- undertake a feasibility study to evaluate the costs and benefits of improving the local manufacture of efficient appliances and equipment.

The program of work will be delivered by DCCEE and its panel of experts in close collaboration with MOIT. The work will commence in September 2012 and will be completed by December 2014 within an overall budget of A\$2.465m.

#### 2. Introduction

The Government of Vietnam has introduced legislation to implement Minimum Energy Performance Standards (MEPS) and Energy Labelling for appliances and equipment. The Australian Government has extensive experience in this area and is providing assistance to the Government of Vietnam through the Vietnam Energy Efficiency Standards and Labelling (VEESL) project, funded by AusAID.

The aim of the VEESL Program is to assist Vietnam to achieve greater prosperity, reduce carbon emissions and increase energy security through effective Standards and Labelling to improve the energy efficiency of equipment and appliances sold in Vietnam. This will involve the Australian Government Department of Climate Change and Energy Efficiency (DCCEE) assisting the Government of Vietnam to develop and establish:

- clear standards and regulation;
- registration and reporting systems;
- effective monitoring, verification and enforcement processes;
- test capacity and procedures; and
- evaluation mechanisms.

The VEESL Program will support the Ministry of Industry and Trade (MOIT) to develop their capacity to implement, manage and evaluate their Standards and Labelling program on an ongoing basis. We also aim to establish a sustainable infrastructure through supporting the development of monitoring, verification and enforcement processes and test capacity.

The Schedule of Activities agreed by AusAID and DCCEE requires the production of this Inception Report, containing the Work Plan as agreed with the Ministry of Industry and Trade (MOIT). The Work Plan is set out in Section 3.

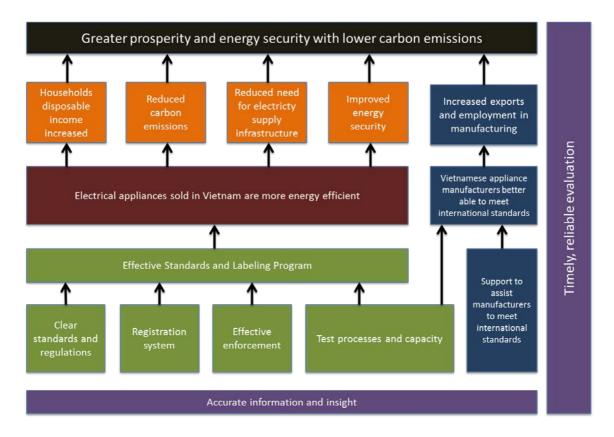
This Inception Report is informed by the following work:

- a scoping mission to Hanoi in December 2011;
- a visit to DCCEE by Vietnamese officials in February 2012;
- an Inception Workshop held in Hanoi in July 2012;
- a review of the legislation and associated regulations establishing the Standards and Labelling program;
- visits to test laboratories;
- a review of the registration process and database;
- discussions with stakeholders, particularly MOIT, the Hanoi Department for Industry and Trade, the Institute of Energy and the Vietnam Standards and Quality Institute; and
- a market survey to inform the process and establish a baseline.

#### 3. Work Plan

#### What VEESL will achieve

The aim of the VEESL Program is to improve prosperity in Vietnam while increasing energy security and reducing carbon emissions. It will do this by supporting the Government of Vietnam to implement their program of Minimum Energy Performance Standards (MEPS) and Energy Labelling. The project activities and intended outcomes are illustrated below.



The aims of the project are to support the Government of Vietnam and the test and regulatory bodies to:

- establish test and performance standards that are consistent with international best practice and appropriate to local circumstances;
- establish an efficient and effective registration system;
- monitor and enforce compliance;
- ensure that the local test laboratories have appropriate skills and equipment to support regulators and manufacturers;
- support local manufacturers to manufacture energy efficient products;
- communicate the program to manufacturers, retailers and consumers; and
- monitor and evaluate the program.

The support will be delivered between September 2012 and December 2014 within an overall budget of A\$2.465m.

# Establish test and performance standards that are consistent with international best practice

The process of developing test and performance standards is well advanced and VSQI, the body responsible, has the skills and capacity to complete the process. However, there is an opportunity to increase the effectiveness of the process by sharing international best practice and establish links with other regional energy efficiency programs. The project will provide support to VSQI resulting in the following anticipated outcomes:

- performance standards will be set at optimal levels balancing economic benefits for consumers and local manufacturers in order to reduce dumping of inefficient products in Vietnam;
- local test standards will be based on and consistent with international or regional test methods;
- increased capacity and skills within VSQI to develop and revise standards in the future:
- a forum to promote dialogue on standards between Vietnam and other SE Asian governments to encourage consistency of regulation; this will reduce costs for governments and manufacturers, and improve compliance in the region; and
- increased capacity within government to deliver the proposed expansion of the standards and labelling program to cover a wider range of products.

To achieve this, assistance from the VEESL Program is proposed to cover the following:

- assembling and providing information on the status of international standards for these products through its consultants, testing guidance notes, product performance information and benchmarks;
- reviewing draft TCVNs as part of the stakeholder consultation process and provide comments to VSQI;
- initiating a dialogue on product performance standards between Vietnam and other SE Asian governments to encourage consistency; and
- identifying potential stakeholders for consultation on draft standards, including international suppliers, and supporting outreach activities, including consultation forums.

#### Establish an efficient and effective registration system

The current manual system requires considerable use of scarce staff resources and there are concerns about MOIT's ability to cope with demand prior to the introduction of mandatory energy labelling. MOIT is developing an online registration system that will have sufficient on-going capacity and that will provide program management information. The framework for this automated system has been developed but it is not yet operable and is currently not resourced.

To overcome the current back-log of manual registration processing, we propose to provide additional, temporary resources to MOIT to increase processing capacity in the

short term. The project will also support implementation of the automated online registration process. The outcomes of this support will be:

- increased capacity to process applications for registration by product suppliers;
- improved ability to monitor registration processes;
- improved capacity to track product performance trends;
- reduced risk of interference in the operation of the market caused by problems with supplier registrations; and
- ability to meet government timetable for the introduction of mandatory MEPS and Labelling.

To achieve this, assistance from the VEESL Program proposes to cover the following:

- review progress with the registration process and develop a plan to establish the system in consultation with MOIT;
- work with MOIT contractors and, if needed, commission new contractors to establish an online registration process; and
- the employment of two additional short-term contractors to work with MOIT to manually process registration applications prior to commissioning of the automated online system. Once the back-log of written applications is cleared, this resourcing will no longer be required.

In addition to recruitment, the VEESL Program will supply computers for VEESL-funded staff where required.

#### Monitoring, verification and enforcement

An effective monitoring and enforcement scheme will be required to ensure compliance with the MEPS and labelling program and protect the investment made by the majority of suppliers. There is an opportunity to work with MOIT and the regional Departments of Industry and Trade (DOITs) to establish an effective regime in parallel with the introduction of the Program. The outcomes of supporting monitoring, verification and enforcement will be:

- early detection of breaches allowing them to be addressed swiftly;
- a functioning enforcement process, where government staff clearly understand their roles and responsibilities and are able to respond quickly to suspected breaches of program rules;
- a better understanding of the enforcement actions that suppliers and laboratories can expect in response to suspected and proven breaches;
- confidence in the scheme among manufacturers, retailers and consumers;
- manufacturers understand the risks of non-compliance and develop a compliance culture; and
- increased financial, energy and carbon savings through a reduction of noncompliance.

To achieve this, assistance from the VEESL Program is proposed to cover the following:

- support for MOIT and DOIT to undertake a nationwide survey of energy label and registration compliance in the months following the introduction of mandatory labelling, Feb-May 2013;
- commission check tests on samples of regulated products using independent test laboratories located in Vietnam and overseas;
- workshops with MOIT, DOIT and Market Control Agency staff to identify enforcement procedures and responsibilities, to inform the development of an enforcement policy and implementation manual;
- review and contribute to enforcement policy documents and implementation manuals; and
- assist MOIT to develop and implement a communication strategy to explain the monitoring, verification and enforcement processes and publicise market surveillance outcomes.

#### **Building local test capacity**

There is currently no capacity to test televisions. Additionally, there is also an opportunity to improve the technical and commercial skills of test laboratory staff. We propose to provide support to test laboratories in Vietnam to achieve the following outcomes:

- establish high quality test capacity to support the operation of the MEPS and labelling program;
- support for local manufacturers in testing of products and prototypes stimulating innovation and improvements in the quality of local production;
- generate foreign exchange earnings through offering test services to importers;
- benchmark Vietnamese laboratories' skills and capacity against other laboratories in SE Asia and Australia; and
- start to develop an understanding of, and confidence in, the capacity of test laboratories in other countries.

To achieve these outcomes; assistance from the VEESL Program is proposed to:

- improve the technical skills of laboratory staff through:
  - o *in situ* training by laboratory test experts for key laboratories in Vietnam; the products to be supported would be agreed with MOIT. Laboratory staff may potentially visit the laboratory of the expert tester to witness testing of the same or similar samples; and
  - round robin testing between laboratories in Vietnam;
- establish a program of verification testing to support the compliance regime;
- instigate round robin testing between laboratories in Vietnam and others in the region under the joint supervision of Vietnamese and foreign laboratory staff; steps

will be taken to ensure there is no overlap or duplication with other regional programs;

- provide training courses in business planning. At the end of each course, the trainer could assist each laboratory to draw up their own business plan and:
  - o following a competitive process, finance the purchase of TV test equipment for two laboratories; and
  - o implement a process to commission equipment and train staff.

#### **Industry Transformation Feasibility Study**

Currently, the quality of many of the types of energy consuming products manufactured in Vietnam is not known although anecdotal evidence suggests that some local manufacturers would be unable to manufacture more efficient appliances, as they may not have the necessary design skills or manufacturing expertise.

This situation creates a dilemma for governments wanting to use MEPS to improve product efficiency. The higher the MEPS levels, the more energy consumption can be reduced but local manufacturers may not be supportive of the program if they see it as potentially damaging the market for their products. However the lower the MEPS levels the more the market is open to low quality imports.

While it is beyond the scope of the VEESL Program to effect any industry transformation in the short time available, we propose to undertake a feasibility study in one or more sectors of industry. The sectors would be agreed with MOIT but are likely to include air conditioning, motors and/or fans because of high or rising importance.

Working with industry experts and economic analysts, we would:

- undertake walk-through audits of typical manufacturing facilities to understand product design and manufacturing processes;
- compare the designs and processes with efficient products being produced in other parts of the world;
- quantify the cost of transforming production to higher efficiency products; and
- quantify the economic and environmental benefits of the transition.

If the cost-benefit analysis is positive we would present the results of the study to potential funders of an industry transformation project for example the Vietnamese Ministry of Finance and the World Bank.

#### **Communications**

MOIT has requested support on communications relating to the program. Effective communications will improve:

- compliance because manufacturers and importers will understand what is required of them;
- retailers' understanding of the energy label, enabling them to give better advice to consumers; and

 consumers' understanding of the energy label, enabling them to make more informed purchase decisions.

There is an opportunity to provide targeted support to:

- assist MOIT to develop a communications strategy;
- work with communications agencies and consultants appointed by MOIT to assist them to develop and refine their message; and
- obtain feedback and insight to inform the communications strategy through the planned research with consumers and the end-of-project market survey.

#### **Capacity support for Government of Vietnam**

Staff resources within MOIT are limited with the result that project managers find it hard to devote time to progress the implementation of the MEPS and Labelling program and may not have the resources to engage with the support proposed under the VEESL Program.

To overcome this, it is proposed that the VEESL Program will provide support for MOIT to employ one contractor for the duration of the Program. This person would liaise directly with the VEESL team under the direction of managers at MOIT. The contractor would, under the direction of MOIT staff, undertake a range of activities, including:

- research into a range of policy and technical issues;
- data collection and analysis;
- review written reports to support policy development and implementation; and
- liaise with the DCCEE and Australian-employed consultants as required.

In addition, the impending commencement of mandatory regulations for energy efficiency has led to an influx of paper-based registration applications from industry for the first tranche of regulated products. The volume of applications is very large and MOIT does not have the resources to process these applications at a rate that would see them complete in a timely fashion.

To build MOIT's capacity to manually process registration applications, we propose to fund the employment of two short-term (approx. 6 months) contractors. These contractors would be dedicated to processing the back-log of registration applications prior to implementation of the automated online system. This contribution is considered sufficient to clear the applications within an acceptable timeframe and is not expected to be required for a period longer than 6 months.

Additional yet minor expenses may be met by the VEESL Program to supply computers for VEESL-funded staff, where required.

#### **Program Evaluation**

The energy, cost and carbon savings achieved through the MEPS program will be evaluated in accordance with international best practice through:

- modelling a "business as usual" energy consumption adjusted for increases in GDP and appliance usage; and
- subtracting an estimate of energy consumption if all products performed according to the MEPS using sales data from the registration process, the maximum permitted energy consumption (adjusted for non-compliance) and usage data from consumer surveys.

It is intended that this modelling will be integrated within MOIT's evaluation and reporting processes to provide regular, timely information on the performance of the Program.

The energy, cost and carbon savings achieved through labelling program will be evaluated by taking into account:

- sales of products with energy efficiency performance in excess of the minimum standards; and
- the influence of energy labels on consumer decision making and manufacturers' behaviour.

The contribution of the VEESL Program will be evaluated through a process review and stakeholder interviews to be conducted at the start and completion of the project.

#### **Next steps**

The key next steps are:

- appointment of the Vietnamese project co-ordinator;
- development of detailed implementation plans with MOIT and key agencies including:
  - o VSQI;
  - Test laboratories;
  - o The developers of the registration system;
  - o DOIT; and
  - o Communications agencies.

These plans would be produced by the Vietnamese project co-ordinator supported by international experts.

It is intended that this stage would be completed by early 2013.