Ministry of Industry and Trade (MOIT), Vietnam Ministry of Construction (MOC), Vietnam Ministry of Foreign Affairs, (Danida), Denmark Ministry of Climate, Energy and Buildings (MCEB), Denmark

# Summary Document

## Low carbon transition in the energy efficiency sector

## Vietnam

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### Context

The Governments of Vietnam and Denmark recently initiated a long term dialogue on low carbon transition within the energy sector in Vietnam, specifically targeting energy efficiency initiatives. This dialogue builds on the present cooperation within energy efficiency under the climate change adaptation and mitigation programme (2008-2015) which provides targeted budget support to the Vietnam Energy Efficiency Programme (VNEEP, 2006-2015). VNEEP consists of 11 projects within 4 programme areas: awareness raising; industry; buildings and, transport.

In support of the dialogue on low carbon transition, the Global Framework under the Climate Envelope 2012 has funded a project on energy efficiency sector in Viet Nam. The project consists of two components: the first supports the Ministry of Industry and Trade (MOIT) in promoting energy efficiency in the Small and Medium Enterprise (SME) sector with a focus on the brick, ceramic and at least one other sector to be decided upon; the second provides support to the Ministry of Construction (MOC) in implementing the building codes for energy efficiency.

Support to SMEs in the chosen sectors is a priority for the VNEEP. SMEs account for 45% of the industrial energy use in Viet Nam and offer good prospects for energy efficiency savings and Green House Gas (GHG) emission reductions. SMEs play an important social and economic role and have the potential to contribute to the green growth and promotion of green jobs. SMEs are relatively unsupported by other donors and, because of their small scale they offer a cost effective opportunity for physical improvements to be achieved in the 3 year period. Earlier experience shows that the brick and ceramic sectors show the greatest potential for scaling up energy efficiency of SMEs. A range of criteria including the potential for stimulating commercial partnerships between Vietnamese and Danish companies will be applied to select a third sector for support.

Support to energy efficiency to buildings through implementation of the building codes is selected because it offers a huge potential for energy savings and GHG emission reduction if building codes are enforced for new large buildings. This is a priority area for VNEEP and an area that is relatively unsupported by other donors (so far support has been focused on the development of the building code). The building sector also offers good scope for developing a technical collaboration between the MOC in Viet Nam and the Ministry of Climate Energy and Building (MCEB) in Denmark. In the longer term, should funding be available the component will lead to implementation of energy efficiency demonstration projects.

### Objectives and outputs to be achieved

The development objective is: "Improved energy efficiency in small and medium enterprises and buildings in Viet Nam contributes to sustainable development and a transition to a low carbon economy". This objective is consistent with the VNEEP phase 2 objectives and also consistent with the current Danida support to VNEEP. The immediate objectives are:

For component 1) Energy efficiency in SMEs – "Small and medium enterprises in at least 3 sectors adopt energy efficiency measures that will contribute to the VNEEP energy saving targets of between 5-10%. This objective will be achieved through support to project #2.3 under the VNEEP 2011-15, complemented by the initiation of lasting partnerships between Vietnamese and Danish industries.

For component2) Energy efficiency in buildings - "Improved capacity for implementing Energy efficiency in large buildings improves and contributes to the VNEEP energy saving targets of between 5-8%." This objective will be achieved through support to project #3.1/3.2 under the VNEEP 2011-15, complemented by the initiation of a partnership between the MOC (Viet Nam) and MCEB (Denmark).

The outputs to be achieved within component 1 are:

- 1. 5 Provincial governments have promulgated energy efficiency and conservation policies/programs and developed action plans to promote the application of energy efficiency and conservation technologies/measures within at least 3 sectors.
- 2. Between 500 and 1000 SMEs are aware of energy efficiency potential, technical solutions, sources of technical support and financial sources, within at least sectors.
- 3. Between 30 and 50 Service providers are strengthened in their capacity to provide energy efficiency services and financial consultancy within at least 3 sectors.
- 4. Between 150 and 250 energy efficiency projects in brick and ceramic and other sectors have been implemented.
- 5. 3 demonstration projects of energy efficiency in at least one other sector implemented and disseminated to other enterprises within selected sector.
- 6. 2 Commercial partnerships initiated between Vietnam and Denmark in at least one sector.

The outputs to be achieved within component 2 are:

- 1. Mechanisms established for regulation
- 2. Capacity increased in MOC and related agencies for implementing the building code leading to gradual compliance for all new buildings by 2015.
- 3. A fundable proposal is presented for approval by the governments of Vietnam and Denmark by the end of the project.
- 4. A partnership mechanism is in place that will enable MOC and others to access state of the art policy and regulatory competence from Denmark within energy efficiency and low carbon transition in buildings.

The project will take place from January 2013 to December 2015 with an inception phase of 6 months. The inception phase will not delay the main activities of the project and its two components, because these activities can start immediately on 1 January 2013.

### Budget

The overall budget is shown below:

Project budget (all figures DKK million)	Total	2013	2014	2015
Component 1	22.0	6.0	7.4	8.6
Component 2	5.5	1.5	2.0	2.0
Programme management, review	2.5	0.7	1.1	0.7
Total (without additional investment)	30.0	8.2	10.5	11.3
Additional investment	35.0	0.0	10	25.0
Total (with additional investment)	65.0	8.2	20.5	36.3

### Table 1: Summary budget

Although most of the support will be in the form of recurrent costs for awareness raising, capacity building and technical support there will also be direct support for investments to replicate energy efficiency projects in the brick and ceramic sectors and to demonstrate new technologies in the third to be selected. An additional investment budget line of DKK 35 million has been confirmed intending to establish a sustainable financing mechanism for energy efficiency in SMEs. Under the VNEEP framework, MOC with the support of technical assistance from MCEB will prepare a demonstration project for energy efficiency in new buildings ready for a potential follow up phase (but not financed under this phase).

**Co-financing by MOIT and MOC**: The implementing agencies of the two components contribute in kind: human resources, working rooms, office equipments and facilities, equipment for energy audit, electricity and water etc.

### Management and funding arrangements

The Energy Efficiency and Conservation Office (EECO) under the Ministry of Industry and Trade will manage the project. EECO is governed by and reports directly to the national steering committee led by MOIT and composed of relevant stakeholders from the public sector, the private sector and civil society both at central and provincial level. Decision-making on project implementation is guided strategically by the overall 10-Year program and operationally by the annual work plans and budgets. EECO, in coordination with its partners, will adjust and refine the strategic and operational plans and present them for approval by VNEEP national steering committee at least once a year. EECO will directly manage component 1 and the MOC will directly manage component 2 as they are the lead agency for energy efficiency in buildings.

To facilitate discussion, enable fast decision making and ensure a constructive dialogue between the partners, a project steering committee will be established. The project steering committee will be composed of the head of the EECO, a representative of MOC, a representative from the Embassy of Denmark in Hanoi (EDK) and a representative of MCEB. It will meet twice a year in advance of the VNEEP national steering committee and will also be timed to coincide with technical supervision visits of MCEB. The project steering committee will endorse annual work plans and budgets for the project and recommend them for approval by the VNEEP national steering committee. The project steering committee will review progress every six months and if necessary make recommendations for adjustment to the workplans and budgets.

As for the current Danida support, the Embassy of Denmark will transfer funds to the Ministry of Finance as Targeted Programme Budget Support (TPBS) earmarked for the specific projects to be supported within VNEEP i.e. project 2.3 on support to energy efficiency in industry and project 3.1/3.2 on support to implementing energy efficiency building codes. The implementing partners will use the normal state management procedures for planning, budgeting, procurement and reporting. These procedures have been tested and reviewed during the last 3 years and are found appropriate. The current Danida support has put in place a range of safeguard measures and these will be continued for the assistance provided under this project.

### Indicators

The monitoring, reporting and verification system for the project will build on indicators that have already been developed under the wider VNEEP programme. A comprehensive set of indicators and outputs has been agreed bilaterally by Denmark and Vietnam (see box 1 below). Technical supervision visits will be made as part of the partnership to be established between MCEB and the MOIT/MOC. A mid-term review will be held after 1½ years.

Next steps to improve the MRV framework include development of methodologies for measuring the GHG mitigation and co-benefit impacts, including gender aspects as well as other aspects of sustainability, such as replicability, revolving funding and maintaining a robust MRV system.

### Assumptions and risks

The main assumptions of the project are:

- The EECO is fully staffed by mid 2013.
- Financial freezes as occurred in 2010/11 do not re-occur.
- A workable mechanism for channeling support for investments is available.
- SMEs continue to invest in energy efficiency measures
- There is demand for Vietnamese/Danish commercial partnerships in energy efficiency.
- The building codes are finalized before the end of 2012 and the environment for enforcement is improved.
- The MRV system is implemented and reliable.

#### Box 1: Outputs and indicators for the energy efficiency project

#### SMEs (ceramics, bricks, third tbd)

- Outputs 500-1000 SMEs aware of energy saving potential, technical solutions, sources of technical and financial support within at least three sectors
  - 30-50 service providers competent and available for the 3 sectors
  - 150-250 EE investment projects implemented
  - Long-term commercial partnership established

#### Indicators Qualitative

- Energy managers network established by end 2013
- Benchmarks established [for each] sector
- Information on EE&C technologies [qualitative: made available online / quantitative: amount of material prepared or amount of events, access points for information distribution]
- Long-term commercial partnership in place

#### Quantitative

- No. of energy audits performed
- No. of enterprises implementing EE measures
- No. of awareness campaigns completed
- No. of enterprises receiving technical assistance and investment support
- No. of energy service providers trained on Energy Service Company (ESCO) business model

#### Building sector (Building Code)

- Mechanism established for regulation: Building Code (BC) and supporting circular
- Capacity enhanced at Ministry of Construction and related agencies for implementing BC, gradual compliance for all new buildings by 2015
- Fundable proposal prepared for a demonstration project by end of project
- Partnership mechanism established enabling access to state-of-the-art policy and regulatory competence from Denmark within energy efficiency and low-carbon transition in buildings

#### Qualitative

- Building Code and supporting circular prepared and adopted
- Fundable demonstration project proposal presented by end 2015
- Partnership mechanism in place

#### Quantitative

- No. and % of new buildings applying EE measures as regulated
- No. of workshops/training events to promote EE standards and design
- No. of trainings held for EE managers
- No. of trainings held for building staff to apply BC and building design
- No. of trainings held for enforcement staff