International Finance Corporation
(IFC)

Proposed Amendment to the Vietnam Sustainable Energy Finance Program (V-SEF) Approved by the CTF TFC on September 30, 2010

I. Background

CTF funding of US$30 million for the program entitled *Vietnam Sustainable Energy Finance Program* (V-SEF) was approved by the TFC on 30 September 2010. The IFC V-SEF Program aims to implement a comprehensive initiative to help develop Vietnam's Sustainable Energy (SE) private financing by supporting local financial institutions and addressing market barriers on a programmatic basis.

The V-SEF Program is comprised of a US$28 million investment component and a US$1.4 million advisory service component, with the additional US$0.6 million allocated to supervision and monitoring. For the investment component, the CTF concessional funds were proposed to be used alongside with IFC own funds in setting up credit lines with three to four commercial banks to finance projects that implement energy efficiency (EE) and/or cleaner production (CP) measures and technologies, as well as small scale renewable energy (RE) projects that reduce fossil fuel consumption. The investment component is complemented by the advisory services program that supports capacity building of financial institutions, capacity building and market awareness for end-users and service/technology providers, sector benchmarking studies, and policy advice to the Government on building the enabling environment to encourage implementation of sustainable energy projects.

II. Statement of Issue

The investment component of the V-SEF Program was designed to provide a combination of CTF and IFC own financing to three to four private commercial banks and/or leasing companies. As explained in the revised Investment Plan for Vietnam (2013), macroeconomic conditions in Vietnam (high inflation and high interest rates) have prompted the Government to adopt policy measures to stabilize the economy. These measures include the establishment of caps to credit growth by commercial banks, as well as, control of loans in foreign currencies. As a result, commercial banks are reluctant to expand their portfolios and particularly limited in their ability to start new credit lines for sustainable energy financing. Further, due to continuing economic downturn, private companies, particularly SMEs, are not willing and not able to take loans that are not essential for their operations.

Despite these challenges, since the approval of the Program, IFC has undertaken significant business development effort to establish a pipeline of investment projects and has conducted number of consultations with potential business partners, project sponsors, financiers. Two investment projects received Board approval by IFC but were put on hold due to the uncertainties in the market in Vietnam.

A third investment project is under negotiation and is expected to move forward. Engagement with other potential clients has been challenging, and therefore IFC doesn't foresee additional investments in the SE sector in the near future that would merit the remaining CTF allocation for investment under V-SEF Program. IFC's assessment is that improvement of the macroeconomic conditions may take more time before they will enable private sector investments to occur in the SE sector. With a view to accelerate the execution of CTF resources (following the target to monitor and delivery of CTF projects established by the TFC), IFC is making part of its unused CTF resources available to be allocated to other priority programs or projects as determined by the Government of Vietnam.

While progress has been slow with the investment component, the advisory services component of the V-SEF Program has been successful. IFC has conducted a number of sector-specific benchmarking studies and is working with service and technology providers in the areas of technical, financial and risk evaluation of SE projects. Moreover, IFC has also provided technical support to two local private banks, which helped them develop credit lines for energy efficiency projects. The total commitment by these two banks to date is approximately US$53 million for energy efficiency projects in their client companies, and these loans are expected to result in 160,000 MWh/year in energy use savings and 88,000 tons of CO_2e/year of GHG emissions avoided. Most significantly perhaps, the project has had an impact in the enabling environment for investments in EE. IFC has worked with the Ministry of Industry and Trade (MITO) to develop an energy benchmarking study for the energy intensive sectors (cement, steel, and textile). This work has informed the Prime Minister's decision to set the National Target Program, requiring these sectors to cut down energy use by 10% by 2015. Also, together with MOIT, IFC has supported the National Energy Efficiency and Conservation awareness campaign. Finally, the project partly contributed to the revision and improvement of the Energy Efficiency Building Code.

Given the success of this advisory program, IFC sees an opportunity to build on what has been achieved so far and increase the impact of the program in the SE sector. IFC proposes to reallocate part of its unused CTF allocation (US$1.6 million) to the advisory service component in order to leverage the success of the program and expand its activities. The original approved program proposed to work with a wide range of key stakeholders in the SE sector with a focus on working with financial institutions. The program also proposed to work with SMEs, industrial associations, local training institutions, technical services providers, ESCOs, and the government. As explained above, several activities to reach each of these stakeholders have been developed, including capacity building, technical support, and market awareness raising.

III. Proposed expansion of the Advisory Component to include Industrial Zones EE/CP

The new activities proposed will conform to the overall objective of the V-SEF Program and promote an innovative way of addressing energy and resource efficiency/ cleaner production at the firm level via a different type of aggregator – Special Economic Zones/Industrial Zones (SEZs/IZs). The new activities will support sustainable private sector growth in Vietnam by further scaling up energy and resource efficiency implementation. This will be the first program-of-its-kind in Vietnam to address energy efficiency, resource efficiency, and clean production within the context of the IZs.

Strategic Context

Vietnam electricity consumption has increased 400% just in the last 10 years. Total energy use per GDP growth has increased by a factor of two compared with less than one in developed countries indicating this growth has not been achieved in a sustainable manner. Energy use is characterized by high losses and low efficiencies due to obsolete industrial technologies and hardware and lack of demand-side management practices. Government's own studies indicate that sectors such as cement, textile, steel, and food processing each have potential to save at least 20% energy. This is also confirmed by energy benchmarking studies completed by IFC, and financed by CTF, working with local partner banks. .

Industrial development is the driver of Vietnam growth with industry contributing 22.7% of the national GDP in 1990 to 41.1% in 2010. A key aspect of this fast industrial growth is the development of Special Economic Zones/Industrial Zones, which contribute about 30% of total industrial output. Using IZs as a platform to further promote energy and resource efficiency as well as cleaner production has several benefits:

- Firms in SEZs/IZs are often export-oriented enterprises serving multinational/global brands motived to reduce environmental footprint and resource intensity in their supply chains in developing countries;
- Firms in SEZs/IZs are more likely to be paying reasonable fees for energy, water, and other infrastructure services thus economics for saving resource may be more favorable.
- Some SEZs/IZs could also offer potential for developing biomass-based renewable energy projects as alternative to fossil-fuel combustion given the increasing demand from local industry and unreliable power supply in some locations;
- SEZs/IZs offer a good technical platform for implementing circular economy (e.g. waste exchange among nearby tenants) and energy symbiosis concepts (e.g. waste heat recovery from one plant used to generate electricity/steam for use by others in the same IZ). Some larger zones could offer a good framework for international cooperation in clean technology transfer because equipment vendors and their services providers would have access to multiple co-locate end-user for their hardware/services.
- SEZs/IZs may have a greater interest in implementing environmental/efficiency improvements because of increasing public visibility and awareness; working directly with IZ management could provide another avenue for "changing mindset" among IZ firms .
- Ministry of Planning and Industry's Department of Economic Zones Management (MPI) is interested in promoting EE/CP interventions in IZs and transforming selected zones into "eco-efficient" zones that are not only environmental compliant but also models green growth. Using a holistic approach, MPI aims to attract more foreign and domestic investments, promote job growth, and foster technology innovation in IZs under its management.

Scope of new activities

The new advisory activities will expand the scope of IFC's EE/CP engagement beyond local financial institutions to private sector firms located in selected IZs. This will provide a platform for developing new GHG-reduction projects for potential investment by commercial banks and other financial institutions. Working directly with IZ owners and MPI should also facilitate longer-term uptake of projects that save energy and other valuable resources. The planned EE/CP activities for IZs are designed with the following objectives:

Objective 1: Demonstrate Business Case for EE/CP Interventions via Firm-Level Projects

This will be achieved by performing detailed assessments to develop demonstration projects in pilot IZs and directly engaging with factories to promote adoption of best practices/technologies that save energy, water, and/or chemicals. The project's main focus will be IZs in Vietnam but it may be necessary to include other industrial clusters or pollution hot spots for practical reasons. The following activities are planned:

- Evaluate and select five pilot IZs based on pre-established selection criteria;
- Engage IZ management to nominate factories for participation in demonstration program;
- Conduct scoping/diagnostic visits to 30 factories in the pilot IZs to evaluate EE/CP potential;
- Conduct audits at 25 short-listed factories to evaluate technical/financial feasibility of options;
- Develop complete implementation packages to facilitate project engineering and financing.

Objective 2: Help Multiple IZ Owners Adopt/Promote EE/CP Based Initiatives in their Zones

To promote wider EE/CP uptake in IZs, IFC will work with IZ Management and factories to address knowledge gaps regarding available clean technology solutions and their economic benefits. Building on direct client-facing work, IFC will scale up impact by focusing on a few energy intensive sectors with large environmental footprints located within IZs. Sectors of interest include cement, steel, pulp and paper, food processing, textiles, and plastics. The following activities are planned:

- Conduct five workshops/training sessions to raise awareness of EE/CP business case by sharing demonstration project case studies from pilot IZs with other IZs;
- Develop three additional benchmarking studies for sectors with good energy-and-water saving potential and share with industries to illustrate improvement opportunity/value; and
- Work with five IZ owners to develop/test drive EE/CP framework guidelines for tenants (e.g., voluntary covenants signed between IZ management and IZ firms to drive GHG reductions).

Objective 3: Assist MPI Establish Guidelines for Transforming IZs into "Eco-Efficient" Zones

The firm and IZ level assessment/awareness raising work completed will inherently serve as a platform for engaging local industries with regulators, financiers, and other stakeholders. However, for wider uptake by the industrial sector, it is important to have an enabling framework that specifically supports energy/resource efficiency and CP projects by removing hurdles and/or providing incentives. IFC will provide advice to a direct project partner, MPI's Department of Economic Zones Management. Since there is a parallel World Bank (WB) project with MPI on performance based financing of central effluent treatment plants in selected IZs, efforts to enact any new zone-related policies or guidance documents will be coordinated with WB team. Assistance could be provided to MPI on issues such as:

- Criteria for classifying eco-efficient IZs consistent with international best practices;
- Sustainable incentives to make it attractive for a business to locate in an eco-efficient zone;
- Other incentives to IZ management/owners to promote EE/CP in their own zones;
- Monitoring and evaluation of IZ projects/goals for energy and water efficiency; and
- Type of clean technology equipment that should be promoted to support EE/CP projects

Impact and Results

Based on the planned EE/CP interventions, the IFC program will directly avoid additional 75,000 metric tons of CO2e per year by program completion in 2016, increasing to 150,000 metric tons of CO2e annually after program implementation. Moreover, it is expected that the expanded program will generate demand for EE financing.

VI. Proposed amendments to the IFC CTF V-SEF Program

1. With regards to the IFC V-SEF advisory component, IFC proposes to expand its activities to include the work on EE/CP in industrial zones, as explained above.
2. With regards to the US$28 million CTF concessional funds allocated to the IFC V-SEF investment component, the following changes are proposed:
    a. IFC will retain USD$5 million of concessional finance to pursue an opportunity to co-invest in one commercial bank for energy efficiency financing;
    b. US$1.6 million will be reallocated in form of grants to the expanded advisory services component of the V-SEF Program;
    c. US$21.4 million will be released from IFC V-SEF Program and reallocated to the Asian Development Bank for developing other priority programs/projects as determined by the Government of Vietnam.