



Phan Thiet sand hill

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Dear Colleagues,

We have been together doing good business for the first half of the year 2017. Our growth in development consultancy has been marked with the new establishment of consulting service unit 2.

We much appreciate your continuous efforts and commitment for the last months of the year. Let us keep the pace!

Sincerely,

Nguyen Tuan Anh
Managing Director

CSU News

JICA - DANIDA



Assessment on possibility of applying ESCO Scheme in Quang Ninh province

An early activity under Pilot Activity on Promotion of Incentive for Energy Saving and Management



RCEE team in the seafood processing factory

New project: Revision of energy efficiency reporting framework for industry sector in Vietnam

RCEE – NIRAS works with Japanese Expert Team led by Nippon Koei to conduct an assignment to review the possibility to apply Energy Service Company (ESCO) model in Quang Ninh province. The assignment is an early activity under Pilot Activity on Promotion of Incentive for Energy Saving and Management such as ESCO Project, Subsidy, etc. in the Project for Green Growth Promotion in Ha Long Bay Area, Quang Ninh Province supported by JICA and implemented by a consortium led by Nippon Koei Co. Ltd. The result of this report will serve as inputs for the Steering Committee led by DPI in Quang Ninh to decide the next steps. In Vietnam, ESCO is new concept and there is insufficient legislation framework to facilitate the energy performance contracts (EPC), a special type of energy efficiency contract.

Ministry of Industry and Trade (MOIT) has issued Circular No. 09/2012 to monitor energy efficiency activities among large energy consumers which called Designated Energy Users (DEU) in Vietnam. After several years of practice, the reporting requirements in Circular No.09/2012 were claimed as too complicated and difficult to collect data. Realizing that an efficient data gathering system with accurate and reliable data are key for monitoring and measuring impacts of energy efficiency activities, as well as for defining future policy interventions, MOIT plans to improve the energy reporting framework. RCEE – NIRAS is working in an assignment funded by the Embassy of Denmark, a long-term development partner of Vietnam in energy sector, to support this work.

The objective of this assignment is to assess the current reporting framework on energy consumption in industrial enterprises in order to propose and test a new data collection and reporting protocol as an input to the revision of circular 09/2012 on mandatory planning and reporting of energy efficiency activities by DEUs.



CSU News

IFC - UNDP

Vietnam has seen rapid economic growth attributed by expansion of manufacturing sectors. The Government has promoted industrial parks to establish and integrate domestic industries, which led to significant increase in foreign investment. Vietnam has currently 280 Industrial zones (IZs) which have contributed to socio- economic development in Vietnam, but simultaneously, they have also caused negative impacts on the environment and human health.

To address increasing environmental issues and transform its economic structure toward low carbon path, Vietnam has launched Vietnam Green Growth Strategy (VGGs) in 2012, which stipulates 3 strategic tasks including low carbon growth, greening of lifestyles and greening of production. The VGGs has set target to reduce annual energy consumption per unit of GDP by 1-1.5% per year by 2020, and by 2050 mainstreaming Green Economic Development. In 2015, Vietnamese government has committed to reduce GHG emissions by 8% by 2030 compared to Business as Usual scenario (BAU) through Intended Nationally Determined Contribution (INDC).

Despite such efforts at national level, there is still lack of regulatory framework that controls environmental impact of IZ. The Consultant team led by Ernst & Young Korea with RCEE – NIRAS as local partner is contracted by IFC to develop national guideline on EIP. The technical guideline could promote participation from private sector and thereby accelerate transformation of IZ to EIP.

Hochiminh City plays an important role in Vietnam economy. The City has contributed 20% of Vietnam GDP and 30% of the State budget. However, together with its growth, the City is facing with several issues such as traffic jam, environment pollution due to construction and industrial production.

Under UNDP's program, RCEE – NIRAS has been selected to support the City to conduct GHG inventory and propose emission reduction measures for the medium and long-term periods using Marginal Abatement Cost Curve (MACC). These outputs will serve as inputs for the study of development plan for Hochiminh in the next period.

Consultancy for Eco-Industrial Park Guideline Development

Vietnam has currently 280 Industrial zones (IZs) which have contributed to socio- economic development in Vietnam, but simultaneously, they have also caused negative impacts on the environment and human health.

New project: GHG inventory and development of emission reduction measures for Hochiminh City.



CSU News

World Bank

The World Bank contracted the Consulting team led by RCEE – NIRAS to formulate an action plan for energy efficiency in food processing industry in Vietnam.

The team has proposed an action plan on energy efficiency improvement and ozone depletion substances phase-out in the food processing sector, with focus on frozen seafood and sugar industry, including short-term and long-term targets and implementation measures. For seafood sub-sector, the short and medium target is set to reduce 13% of the total energy consumption and 24% of the energy consumption compared to the business as usual in long term. For sugar sub-sector, in short and medium term and in long term, the energy consumption can be reduced by 14.7% and 30.5% respectively.

Besides, RCEE-NIRAS has developed the lists of energy conservation measures based on the detailed investigations carried out during energy audits and from the sector - wide surveys in accordance with the international benchmarking standards. The energy conservation measures are prioritized based on the payback period and the marginal cost (investment cost per unit of energy saved).

Under the World Bank's support, Vietnam Energy Efficiency Financing for Industrial Enterprises (VEEIEs) has been developed, aiming to improve energy efficiency through an IBRD loan to support energy conservation investment in Vietnam.

In line with VEEIEs, a carbon finance facility named Vietnam Energy Efficiency for Industry Program (VEEIP) is intended to be developed with the view that the use of carbon finance could contribute towards better access to financial resources for the investment projects (helping to alleviate financial barrier). The program could be designed under the Carbon Partnership Facility and/or under the Scaled-up Crediting Fund (Transformative Carbon Asset Fund, TCAF) depending on the volume of emission reductions, selected design features and the pricing mechanism. The VEEIP is also intended to test and apply some of the principles and features consistent with the current guidance and thinking on New Market-based Mechanisms (NMMs) and considering the circumstances of the energy efficiency initiatives in the industrial sectors in Vietnam.

For the period from June 2017 to February 2018, our national energy specialist has been working to support for the Project Design Document (PDD) preparation and validation response of the VEEIP, and Support for the preparation of the POL-MAC analysis on the energy efficiency in industry.

Energy Efficiency Action plan for the food processing industry

As part of the study: Food processing industry-Strategic sector study and subproject pipeline development for improving energy efficiency with integrated ozone and climate benefits

New project: Support Vietnam Energy Efficiency Financing for Industrial Enterprises

CSU News

GIZ



ip by the RCEE-NIRAS Consultant

Development of Green Growth Action Plans for 5 Mekong Delta Provinces

A core challenge is that the governmental institutions at the national and provincial level lack the planning, technical and financial capacity to enable the coastal ecosystems of the Mekong Delta to be developed in a manner that is resilient to climate change and offers potentials for mitigation, respectively green growth.

Having thoroughly considered GIZ's strengths in technical expertise and long-term experience in Vietnam and in line with the strategic objectives of the Macroeconomic Reform/Green Growth Programme, the Programme will support the development of some selected Provincial Green Growth Action Plan (PGGAPs). RCEE – NIRAS has been selected to support Kien Giang, Hau Giang, Soc Trang, Bac Lieu, Ca Mau Provinces to develop their PGGAPs. Under this assignment, the Consultant team has been developing the draft PGGAPs, including a proposal on emission reduction options based on the results of GHG Emission Inventory and Provincial Marginal Abatement Cost Curve (MACC) analysis. The assignment is scheduled to complete by end of September 2017.



Meeting with province

Projection of energy intensity for the period 2016 – 2020

Energy consumption and energy intensity are crucial indicators to monitor, evaluate and report the results of the development and implementation of socio-economic development plans and strategies. This information provides inputs for the policy makers while revising the policies and developing solutions to gain better achievements of the growth targets.

Under the project: "Strengthening Capacity and Institutional Reform for Green Growth and Sustainable Development in Vietnam", RCEE – NIRAS's consultant has been selected to perform the projection of energy intensity of the economy for the period 2016-2020. The Consultant will develop reliable methodology based on modelling or robust & high-quality collective expert judgement. By compiling the latest data on trends in the energy use and determining key drivers of the past trends in the energy use that should be used in the forecast, the Consultant will prepare forecast for energy use for the period 2016 - 2020



Monitoring and Reporting on City-level Climate Change Mitigation Actions in Hochiminh

Measurement, reporting and verification (MRV) is a very important component of mitigation actions planning and implementation process.

As a great portion of GHGs is emitted from urban city areas, cities, Ho Chi Minh need to take actions to reduce GHGs in order to ease climate change and its impacts. Measurement, reporting and verification (MRV) is a very important component of mitigation actions planning and implementation process. MRV not only serves as an effective tool to quantify the mitigation impacts of mitigation actions in the form of GHG emission reductions in a transparent manner, but also ensures appropriate implementation of mitigation actions in the context of national/province/city development priority. RCEE-NIRAS is working to develop MRV Manual under JICA funded Technical Cooperation named "Project to Support the Planning and Implementation of NAMAs in an MRV Manner".

Some MRV case studies of HCMC have been selected to include in this Manual to illustrate the useful lessons and tips related to monitoring and reporting activities observed during the MRV trial conducted under the JICA project. Case studies on both policy based NAMA and project based NAMA for three major GHG emitting sectors of HCMC, namely energy sector, transport sector and waste sector, are presented. 02 projects named "Replacing and Renovating the public lighting system in small street" and Project to install the solar PV system in the public buildings have been selected for MRV piloting in Energy sector. The project: CNG bus project for the bus route No. 27 has been selected to develop as the case study for Transport sector. In waste sector, electricity generation in Go Cat Landfill Project, which helps to reduce CH₄ emitted into the atmosphere as well as to reduce fossil fuel consumption for power generation, has been selected as a case study.

DANIDA - LCEE



Energy Audit at Hyundai Aluminum Vina Joint Stock Company

The energy audit process reviewed most of the energy consumption and production equipment of the factory, showed and quantified the energy consumption of equipment. Based on that the audit team proposed energy efficiency solutions for the factory.

Hyundai Aluminum Vina Joint Stock Company contracted RCEE-NIRAS to conduct energy audit service at their facility. The energy audit process reviewed most of the energy consumption and production equipment of the factory, showed and quantified the energy consumption of equipment. Based on that the audit team proposed energy efficiency solutions for the factory.

The energy consumption is at high level. The factory has implemented some effective saving solutions. However, to achieve higher efficiency, the factory could implement the newly proposed energy solutions. In addition, energy managers are responsible for monitoring and maintaining energy efficiency activities at the factory in the future. In the draft of the Law on Energy Saving, there are clear sanctions on energy-wasting enterprises. The audit report will help the factory complied with requirement and save energy cost.

Preliminary energy audits - Project for Green Growth in HaLong Bay Area, Quang Ninh Province

To report the results of the preliminary energy audit, discuss the energy consumption status as well as energy saving solutions that can be applied to each participating unit in the project.

After executions of the preliminary energy audits for some of the participating facilities in April 2017, by June 2017 a team of experts from RCEE-NIRAS and the project Consulting Nippon Koei and equipment providers (Mycom, Panasonic, Daikin, Kawasaki) have had the next working session with all participating units.

There are specific EE measures identified. For the facilities in services and hotels, energy saving solutions are replacing the fluorescent bulbs by the LED; replacing the existing chillers by high performance chillers. In addition, installation of cold storage for air conditioning system is considered because of the price difference between low and peak hours. For clinker and cement production plants, utilizing waste heat for electricity generation is taken a great interest. However, anticipates high investment cost.

EMS News

DANIDA

To promote the energy efficiency measures in 3 sectors: brick, ceramics and food processing

Hai Ha Confectionery Joint Stock Company (in Hanoi) with the measure:

"Conversion/Installation of biomass boilers replacing fossil energy fired boilers"

"Installation/Conversion from coal fired boilers to gas fired boilers" of Vu Van Chien household at Village 4, Tien Phong, Kim Lan Commune, Gia Lam District, Hanoi



Kim Lan gas fired

Green Investment Facility Program is the financial mechanism of the project: "Low Carbon Transition in Energy Efficiency in Vietnam" (LCEE Project) to promote the energy efficiency measures in 3 sectors: brick, ceramics and food processing, funded by DANIDA. RCEE-NIRAS undertook the pre-check at Hai Ha Confectionery Joint Stock Company in March 2017 (in Hanoi) for "Conversion/Installation of biomass boilers replacing fossil energy fired boilers". The company is using fluidized bed boiler which is designed to with coal. Because the city environment is inappropriate for this fuel, the company has decided to convert to biomass fuel. However, structure of existing boiler is not suitable for biomass fuel, which leads to low steam generation efficiency and high expense. The new factory at VSIP Bac Ninh is equipped with the new fluidized bed boiler which has the appropriate structure for biomass firing, high efficiency and reduces emissions to environment. Biomass fired boilers should bring about not only high efficiency but also energy saving, and especially very safe.

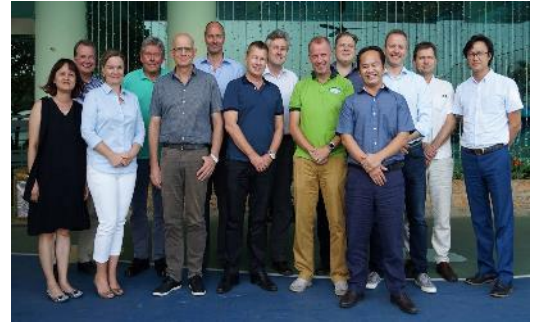
Another energy audit had been carried out under this project is "Installation/Conversion from coal fired boilers to gas fired boilers" of Vu Van Chien household at Village 4, Tien Phong, Kim Lan Commune, Gia Lam District, Hanoi in May 2017. Nowadays, gas-fired ceramic kilns at the household are very effective, saving time and labor effort. The gas kiln also saves space, which brings higher product quality, quantity and the variety of designs. The number of batches is increased comparing to the coal fired kiln and the product is preferable on the market.

The project has helped the household businesses to improve their production efficiency, and brought the experience of energy efficiency and emission reduction to the environment comparing the use of the old coal fired kiln. Many households have become focused on the investment in installing new kiln systems, which is economically and environmentally efficient.

Staff Corner

NIRAS International Consulting (#NIC) ASIA regional workshop

NIRAS International Consulting (#NIC) ASIA regional workshop took place in Hanoi during 1-2 June 2017. Participants from various NIC offices including: Denmark, Finland, Germany, Sweden, Nepal, Lao, Myanmar, Cambodia and Vietnam gathered and discussed strategic business issues. The workshop highlighted the importance of integrity management system in conducting business. NIRAS' Business Integrity and Ethics Policy applies to all NIRAS activities and to all companies belonging to the NIRAS Group. Other companies, with whom NIRAS collaborates, shall also comply with NIRAS' integrity policy.



Vietnamese management team with NIC Team in Hanoi

Congratulate to Mr. Tran Duc Hoa

To achieve the Certificate of International Performance Measurement and Verification Protocol (IPMVP). He is the key technical expert in EMS department who has been worked in RCEE-NIRAS company more than 05 years

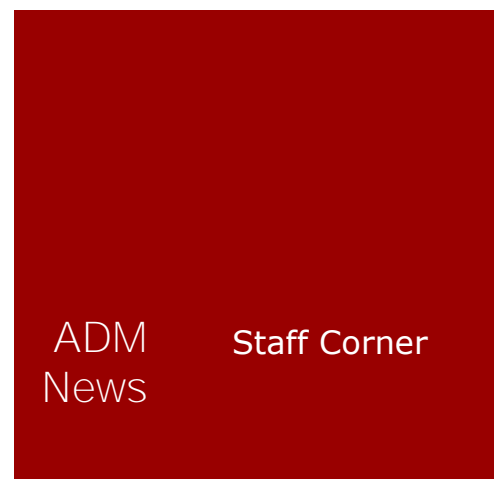
The Certified Measurement & Verification Professional (CMVP®) Program was held at Hanoi Club Hotel in 3 days 24-26 May 2017 and trained 30 professionals from industrial sectors such as textile & garment, cement, steel, power, ESCOs... Since 1997, Efficiency Valuation Organization (<http://evo-world.org/en/>) develops, maintains, improves and publishes the IPMVP. The IPMVP was originally developed to help increase investment in energy and water efficiency, demand management and renewable energy projects around the world. The IPMVP is widely adopted by government agencies, industry organizations, energy service companies (ESCO), financial institutions and purchasers of emission credits to help manage their programs and enhance the credibility of their reported results.



Mr. Tran Duc Hoa in the training

Green Corner

Responding to the self-initiative of tree planting movement inside office, RCEE-NIRAS staffs have organized the green corner to create a sense of cool and refreshing work environment. Please commend the individuals who participated





Upcoming events

❖ “Technical Assistance to apply Low Energy Emission Technologies in Vietnam’s Textile and Garment Enterprises” workshop will be organized on 23rd August 2017 by V-LEEP project in collaboration with VITAS. The workshop will introduce V-LEEP’s support activities for garment enterprises, methods of building energy consumption norms, and global trends in reducing emissions in textiles and garments.

❖ Workshop on Developing, Financing and Investing in Solar PV Projects will be organized on 29-30 August 2017 by V-LEEP project in collaboration with USAID. The workshop will gather policy makers, provincial government officials, utility, investors, project developers, banks and financial institutions together to discuss the opportunities and best practices on legal, economic, and financial issues to develop, finance, and invest into solar PV projects in Vietnam

NIRAS Vietnam (RCEE-NIRAS) is part of the NIRAS Group. The main company is NIRAS A/S with over 1200 employees. NIRAS A/S is a large international consulting engineering company with main office in Denmark. The company was founded in 1956 and since then has expanded through natural growth and acquisition of other companies. NIRAS today consist of 28 Business Units, specialized in Environmental Services, Climate Change and Energy, Water Supply and Treatment Management, and one Business Unit NIRAS International Consulting, which focuses on consulting services in the development aid sector. NIRAS has offices in 15 countries around the world.

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