



**NORDIC PARTNERSHIP INITIATIVE PILOT PROGRAMME FOR  
SUPPORTING UP- SCALED CLIMATE CHANGE MITIGATION ACTION  
IN VIETNAM'S CEMENT SECTOR**



# **INCEPTION REPORT**

**FINAL VERSION**

Submitted to

**Ministry of Construction**

Department of Science, Technology and Environment



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## ACRONYMS

ADB	Asian Development Bank
BAU	Business-As-Usual (scenario)
BUR	Biennial Update Report (by non Annex I countries to UNFCCC)
CO <sub>2</sub>	carbon dioxide (a reference greenhouse gas)
COP	Conference of the Parties (on Climate Change)
CTF	Clean Technology Fund
ECRA	European Cement Research Academy
EE	Energy Efficiency
EPC	Engineering, Procurement and Construction (contract)
EU-ETS	European Union Emission Trading Scheme
EVN	Electricity of Viet Nam
GHG	greenhouse gas
IETA	International Emissions Trading Association
JCM	Joint Crediting Mechanism
METI	Ministry of Economy, Trade and Industry of Japan
MOC	Ministry of Construction
MOF	Ministry of Finance
MOIT	Ministry of Industry and Trade
MONRE	Ministry of Natural Resources and Environment
MOU	Memorandum of Understanding
MPI	Ministry of Planning and Investment
MRV	measurement, reporting and verification
Mt	Million ton
NAMA	Nationally Appropriate Mitigation Action
NDF	Nordic Development Fund
NEDO	New Energy and Industrial Technology Organization of Japan
NEFCO	Nordic Environment Finance Corporation
NOAK	Nordic Working Group for Global Climate Negotiations
NTP-RCC	National Target Program to Respond to Climate Change

PSB	Project Steering Board
PMB	Project Management Board
ROI	return on investment
TA	Technical Assistance
UNDP	United Nations' Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
VABM	Vietnam Association of Building Materials
VGGS	Vietnam Green Growth Strategy
VICEM	Vietnam Cement Industry Corporation
VNCA	Vietnam National Cement Association
VNEEP	Viet Nam National Energy Efficiency Program
WB	World Bank
WHR	waste heat recovery (for power generation)

# 1 INTRODUCTION

## 1.1 Background

According to the Bali Action Plan and its agreed outcome (Decision 1/CP.18), developing countries should consider the implementation of Nationally Appropriate Mitigation Actions (NAMAs) in the context of sustainable development, supported and enabled by technology, financing and capacity building, in a measurable, reportable and verifiable (MRV) manner. The Cancun Agreements in 2010 (Decision 1/CP.16) reinforced the notion, stating that NAMAs should aim to achieve a deviation from business-as-usual (BAU) emissions in 2020, and NAMAs seeking international support shall be recorded in a registry and subject to international MRV. In Durban conference in 2011, relevant decisions were also made on issues, such as reporting of emissions in developing countries, functioning of the registry, international consultation and analysis of developing countries' reports, and market approaches to climate change mitigation (Decision 2/CP.17). At the COP 19 in Warsaw limited progress has been observed related to NAMA and the focus is to have a treaty in place at the COP 21 in Paris in 2015 and realistic NAMA will only be a formal part of a climate agreement afterwards.

Although the concept of NAMAs enjoys wide acceptance and support, the principles and procedures for matching action with support are still under negotiation. Furthermore, there is an urgent need for concrete examples and understanding of what could consist a NAMA, how it could be structured, and what steps are needed to build national readiness to implement NAMAs including domestic financial structures and incentives, to access international climate finance and to ensure up-scaled mitigation efforts. Domestic financial structures and incentives will need to account for a significant part of financing NAMAs.

In autumn 2010, the Nordic Group on Climate Change (NOAK) and the Nordic Environment Finance Corporation (NEFCO) launched the NOAK-NEFCO Partnership Initiative to explore and demonstrate how international climate finance can be matched with up-scaled mitigation plans in developing countries. In a bottom-up approach, the Initiative seeks to establish concrete Pilot Programmes to illustrate how developing countries can prepare and propose NAMAs in a particular economic segment, how these actions could be supported and enabled by technology, financing and capacity building, and how action could be measured, structured and matched with international climate finance as well as with existing and possible new market mechanisms. These Pilot Programmes also aim to conceptualize, test and learn how a future international climate regime, including possible new market-based mechanisms, could be designed to support up-scaled NAMAs in developing countries. Vietnam is one of two selected countries.

During 2011 negotiations were initiated to broaden the institutional basis of the Partnership Initiative with the Nordic Development Fund (NDF). As a result, the Initiative was renamed "Nordic Partnership Initiative", and the Nordic stakeholders of the Nordic Partnership Initiative now include NDF, NOAK, and NEFCO. An agreement has been established between NDF and Ministry of Construction (MOC) in Vietnam. MOC will be the contracting party for the consultancy services.

In January 2014 a contract has been signed between MOC and the Consortium after an international tender procedure with NDF as the party financing the project. The consortium consists of 5 companies – NIRAS, South Pole, Perspectives, VNEEC and NIRAS-(RCEE\_NIRAS). To supplement the team few individuals have been sub-contracted. The contract period is from primo 2014 to primo 2016.

## 1.2 Key objectives

As indicated in the Project Document (PDO) as approved by the Ministry of Construct by Decision No. 1110/QĐ-BXD dated 10 December 2012, the Pilot Program shall fulfil the long-term and specific objectives as follows:

### Long term objectives:

Strengthening Vietnam's capacity to develop and implement an appropriate GHG Mitigation Action Plan, to support the National Target Program to Respond to Climate Change (NTPRCC) and contribute to the global efforts in climate change abatement.

The Pilot Program will help Vietnam to prepare, propose and implement a full-scale scheme of clearly specified NAMAs in the cement sector which could attract international climate finance through the carbon market and other support mechanisms.

### Specific Objectives:

- Collection of up-to-date data on emission reduction potential;
- Capacity to develop baseline emission projections;
- Capacity to estimate (emission reduction) impact of mitigation actions;
- MRV system of international standard;
- Identification of barriers to mitigation action, and proposals for addressing them;
- Identification of appropriate support instruments for mitigation action, including identification of potential sources of financing for support, mechanism for funding, criteria for support, and MRV needs; and
- Relevant institutional arrangements, capacity building and training for all of the above.

## 1.3 Summary of the methodology

The consortium's technical approach and methodology for delivering the expected outputs is described as follows:

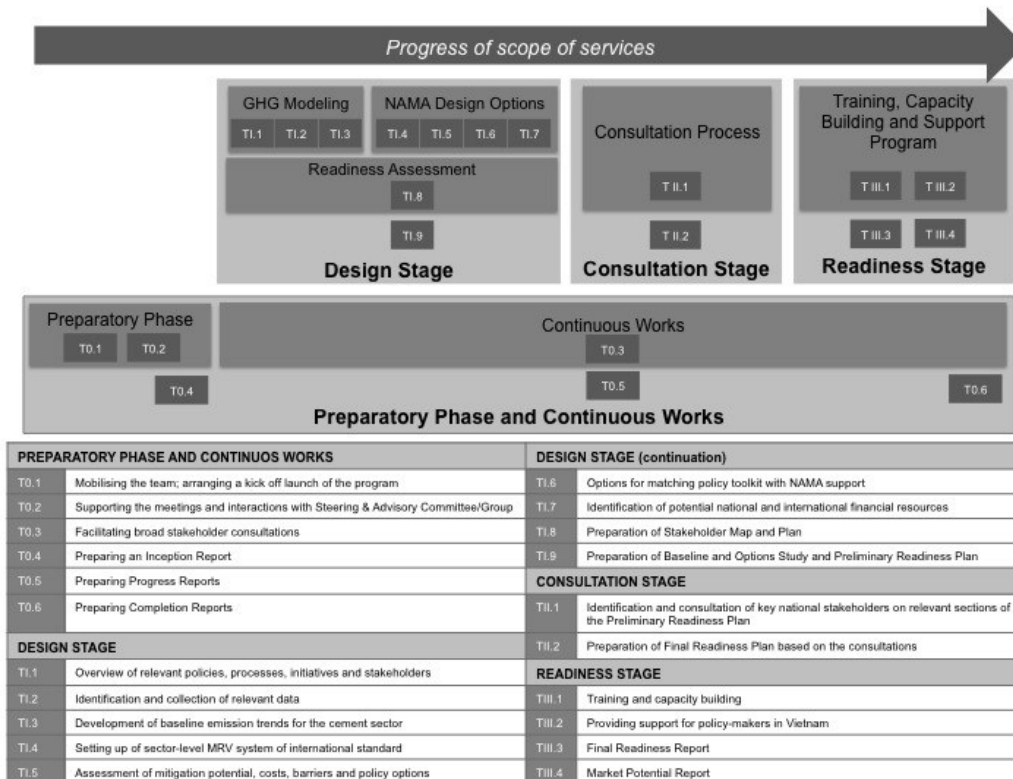
- **Participatory approach involving relevant stakeholders** through one-on-one meetings, joint workshops and several targeted consultations, where stakeholders will be actively engaged in making suggestions for the design of the NAMA.
- **Strong local presence and involvement of high-level Vietnamese experts** in order to ensure an appropriate consideration of national circumstances, the necessary resources for field work, meetings and trainings, and a constant dialogue with the Counterpart through our local partners and their associated networks.
- Consideration of all relevant past, existing and emerging activities and schemes to mitigate GHG emissions within the cement sector through the involvement of a leading industry experts.
- **Consideration of the latest developments** in international climate and financing negotiations through international experts who have been involved in the design of NAMAs in various regions as well as in Vietnamese climate and environmental policies.
- **Utilize the specialized expertise** of each of the consortium partners in a coordinated manner to maximize the efficiency and effectiveness of the team and avoid overlap and redundancy.

- **Iterative working methodology** with cooperation of the different experts right from the start, e.g. between cement sector experts and MRV experts to define the required data.
- **Enhance the cooperation of the multidisciplinary team** through additional missions to Vietnam and additional working meetings in Europe among key international experts as well as frequent meetings in Vietnam among key national experts.

In designing the NAMA framework, particular attention will be given to the following aspects, among others:

- From the start, the Pilot Programme needs to be implemented in a participative manner including consultation and cooperation with multiple stakeholders, in both the public and private sectors
- Consideration of the current regulatory framework as well as the existing capacity and institutional settings of Vietnam in order to ensure a realistic, effective and practically feasible NAMA design including the development of policy instruments from a political/institutional, technical and financial perspective.
- We will focus on the identification of synergies between mitigation and cement sector specific benefits, including the contribution to the sector’s sustainable development and on economic, social and environmental co-benefits.
- A close dialogue will be maintained with the client throughout the duration of the assignment to provide regular updates on the findings and progress made.

The following flow-chart depicts the overall approach and the different phases of our work:





## 1.4 Overview of NAMAs in Vietnam

### NAMA context

In COP 16, the Parties recognized "that deep cuts in global greenhouse gas emissions are required... to hold the increase in global average temperature below 2°C above preindustrial levels...". Within this context, while developed countries set up and implement economy wide emission reduction targets to achieve the goal of 25 – 40% emissions reductions below 1990 level by 2020, developing countries implement NAMAs with the goal to achieve deviation from BAU emissions in 2020.

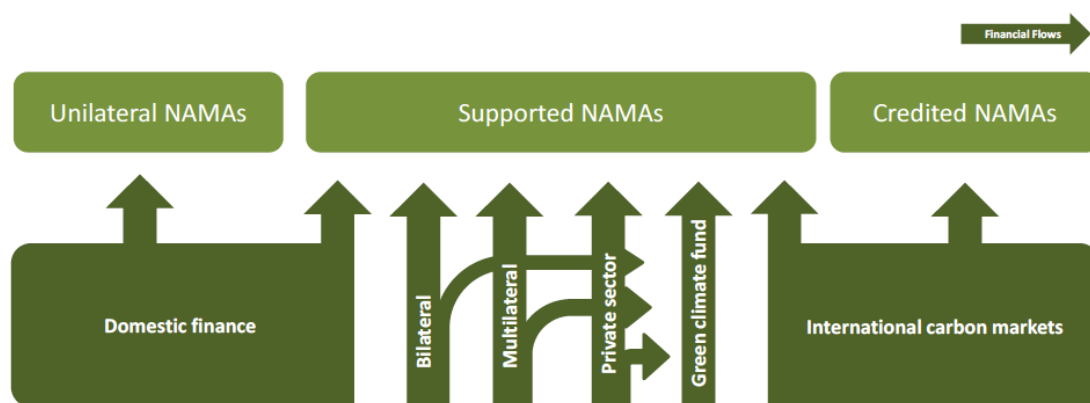
The NAMAs can take the form of programs, policies regulations, standards, or financial incentives. However, at the UNFCCC level, many features relating to development, implementation and support of NAMAs are still not defined. The NAMA concept is still developing and will properly be evolved through learning-by-doing efforts, presently underway in developing nations.

To date, no description of the content of a NAMA document has been provided. The content of a NAMA document will have to address certain common key aspects to provide clarity on the implementation of the NAMA. There are suggestions to include typical information included in the Global Environment Facility (GEF) and the Montreal Protocol Fund (MP) project documents, and corresponding information in a NAMA document.

The main aim of this project is to develop documents describing the NAMA and the plans to implement the envisaged actions to meet the voluntary mitigation efforts in the cement sector in Vietnam.

### NAMA types

The Cancun Agreements (2010) recognized two types of NAMAs—those developed with domestic resources (unilateral NAMAs) and those requesting international support in the form of financing, technology transfer or capacity building (supported NAMAs). Credited NAMAs have also been discussed, whereby a developing country earns credits that can be sold in the global carbon market by reducing emissions below an agreed crediting baseline.



Source: *Developing Financial NAMAs*, IISD 2013

Identifying and proposing a suitable type of NAMA to mitigate GHG emissions in cement sector in the context of Vietnam is one of the major activities of this project.

### NAMA reporting and registry

At COP17, it was decided that developing countries should submit their first biennial update reports (BUR) by December 2014 and the subsequent every second year.

BUR containing updates of national greenhouse gas inventories, including a national inventory report and information on mitigation actions, needs and support received and the following elements on NAMAs:

- (a). Information on planned NAMAs
- (b). Information on NAMAs under implementation or already implemented
- (c). Information on support.

In Vietnam, MONRE is responsible for preparing the BUR. It is recommended that this project activity shall be informed to the MONRE officially in the Quarter II at the latest in order to be included in the first BUR of Vietnam. A close cooperation with MONRE though out the project implementation given that MONRE is the Vietnamese UNFCCC focal point and will play a key role in coordinating the different Vietnamese NAMAs, as well as preventing overlaps and “double counting” of mitigation,

Apart from that, in 2013 before COP19, The Nationally Appropriate Mitigation Actions (NAMAs) registry has been released as a functional, public, web-based platform by the UNFCCC. (<http://www4.unfccc.int/sites/nama/SitePages/Home.aspx>)

The registry is set up to:

- Record individual NAMAs seeking international support
- Record individual NAMAs for recognition
- Record support available/provided facilitate matching of the actions with support

The NAMA registry has voluntary participation and information that has been specifically requested for the purpose of recording in the NAMA registry is available in this platform. The registry has not been designed to execute functions of measurement, reporting and verification of mitigation actions and support.

Up to this date, there is a number of on-going activities in Vietnam to facilitate NAMAs in different sectors. None of them has been appeared at the UNFCCC Registry.

MONRE is currently working on the NAMA Institutional Framework, which includes the NAMA Submission Procedure, National NAMA Registry among the others. This activity will be implemented under the capacity building project on NAMA Policy funded by the Japanese Government from 2014-2017.

### NAMA Readiness and NAMA proposal

During the inception phase an overview of the NAMA readiness plans and NAMA proposals in Vietnam have been prepared and an overview is enclosed as Appendix 1.

It is expected that MOC and MONRE will facilitate the coordination with these other NAMAs, as MONRE has a special role in coordinating NAMAs in Vietnam. The Consortium will provide their service in line with related on-going and planned work such as the project “*Support to the National Target Program on Climate Change with a focus on Energy and Transport*” (TA-7779) funded by NDF through the Asian

Development Bank (ADB), in a way that involves other actors supporting mitigation. The Consortium will provide technical assistance in relation to the NAMA Cement project to support MOC and other key ministries (MPI, MONRE, MOIT, MOST) to develop readiness to benefit from international climate finance through technical products during the Design phase as well as workshops/trainings during the Consultation phase.

### 1.5 Cement sector in Vietnam

Vietnam is among the top cement consumer and producer worldwide. The following diagrams are sourced from International Cement Review Magazine.

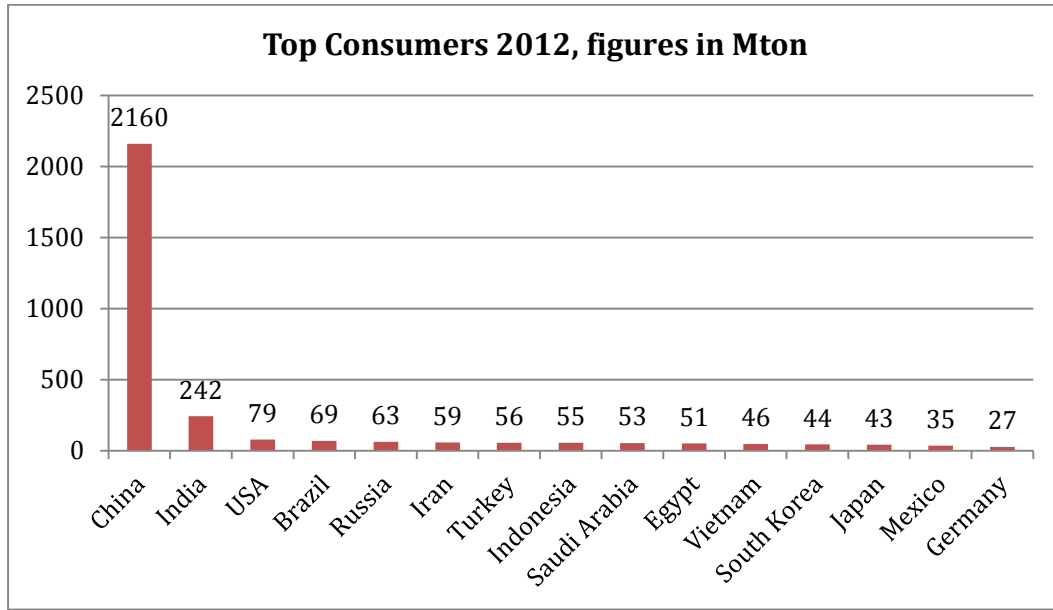


Figure 1: A top 15 list of the countries purchasing most cement in terms of weight.

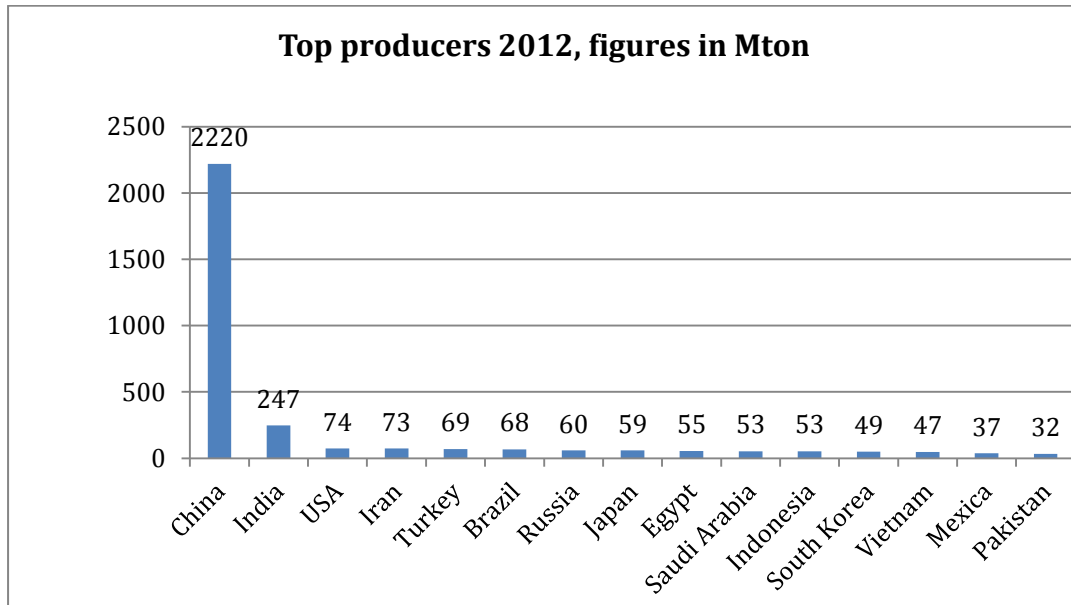


Figure 2: A top 15 list of the countries producing most cement in terms of weight.

MOC is in charge of planning, management and regulate cement market in Vietnam. In Appendix 2 is an overview of horizontal rotary shaft kiln under operation up to 2010, while in Appendix 3 is an overview of new cement plants in the period 2011-2022 with vision to 2030.

In 2013, total capacity of the cement plant in operation is approximately 70 Mt. Total demand is approximately 61 Mt (an increase of 13.9% compared to 2012). 47 Mt of the total demand is domestic demand while 14 Mt is exported.

Cement plants in Vietnam is either owned by the state, private owned or join-ventured with foreign companies. VICEM is the largest producer with installed capacity estimated to 45% of the overall market in Vietnam. Appendix 4 presents an overview of the holding organisation of VICEM and its cement plants.

According to the approved Master Plan for development of cement industry in 2011-2020 with vision to 2030 by the Prime Minister, the estimated demand for domestic market will be:

Year	Demand (Mton)
2011	54-55
2015	75-76
2020	93-95
2030	113-115

The Master Plan specifies a range of technical requirements that the cement producers must comply with:

Specific thermal consumption	<=730 Kcal/kg clinker <=3050 MJ/ton clinker
Specific electricity consumption	<=90 kWh/ton clinker
Dust emission	<=30 mg/Nm <sup>3</sup>

The consortium would like to note that both the specific thermal consumption and specific electricity consumption are quite ambitious targets. But for the dust emission the state of the art technology is less than 10 mg/Nm<sup>3</sup>.

Regarding the technology, the Master Plan request the investor for new cement projects to invest in Waste Heat Recovery system (WHR) for power generation. It is compulsory for new plants with capacity above 2500 t clinker per day. For the existing plants, they should finish the investment of WHR before 2015.

The government encourages new investment combined with waste (industrial and municipal) treatment solution with cement kilns.

By 2015, the government also wants to stop operation of vertical shaft kiln which can be replaced by horizontal rotary kiln.

It is mentioned in the approved Master Plan that VNCA is responsible for collecting data and consolidates new technology solutions, environmental protections, trading issues to support government regulating and developing cement industry.

## 1.6 Approach for the preparation of this Inception Report

The general expectation is that the core of the project should not be changed as it has been through a competitive process and furthermore through the commercial offer,

especially in TECH4 of the commercial offer the core elements and the challenges in project has been identified and incorporated.

The Inception Report has been further refined with information gathered over a period of 2 month period after the signing of the contract. The Inception Report has been elaborated by a mixed team of international and national experts. The international team from NIRAS has had a 14 days mission to Vietnam for the preparation of the Inception Report in close cooperation with the national experts and the other international experts.

A significant number of meetings has been conducted with the Vietnamese stakeholders, the purpose has been twofold. i) One to gather input to the preparation of the Inception Report and 2) second to start the interaction with as many stakeholders as possible to have the right understanding and support during the execution of this project.

Both MOC and the Consortium have decided to allocate significant time for the Inception Phase and MOC has participated together with the Consortium and other stakeholders. This has given that impression that the NAMA cement is a very high priority for the Vietnamese Government.

## **1.7 Structure of the Inception Report**

In the contract between MOC and the Consortium the first product is the preparation of an Inception Report. The Inception Report is organized into seven chapters.

Chapter 1 provides background, key objectives, summary of the methodology, overview of NAMA, overview of cement plants, approach to this Inception Report and also the structure of the Inception Report. In appendix 1 is an overview of the NAMA readiness and NAMA proposal and in appendices 2-4 are the overview of the cement plant existing and planned project and finally an overview of plants which are partly or with full ownership by VICEM.

In Chapter 2 the focus is to present the key findings from the meetings with MOC and other stakeholders. A short presentation of the project has been prepared and it has been handed out during the meetings with the stakeholders (appendix 9). An overview of the mission plan is presented in Appendix 8.

Chapter 3 is based on the observations from Chapter 2 and the focus is on tasks, which should require adjustments from the project proposal. For easy reference the minutes of meeting from the December 2013 is presented in Appendix 6 and the budget from the contract is presented in Appendix 7.

In Chapter 4 the focus is twofold; 1) to describe the administrative set-up of the Consortium and 2) to present the Consortium's approach to cooperation with MOC.

Chapter 5 provides a detailed work plan with focus on resources, responsibilities, tasks, products and timing. An overview of all the products and sub-products are presented in appendix 5

Chapter 6 is an overview of the payment milestones presented.

Finally Chapter 7 presents all the enclosed Appendices.

## 2 KEY OBSERVATIONS FROM MEETINGS MOC AND STAKEHOLDERS

The main observations from the meetings with MOC and with other stakeholders done during the Inception Phase is highlighted below. The observations from each stakeholder is presented in bullets to give an easy overview.

### MOC (based on several meetings and daily interaction)

- Administrative issues

To ensure full involvement and overall coordination of MOC in the project the ministry will be updated on a regular basis, for example once every week, with focus on challenges and potential activities which require input and/or support from MOC. The updates can be done through meeting and/or e-mail. This is supplementary to quarterly reports.

MOC and the Consortium agreed to focus on more products and intermediate sub-products to increase the interaction between the two parties. Based on this nearly all sub-products will be structured as written products, which can be used in the dialogue.

- Participation and consultation

Discussions on an effective way to get involvements and acknowledgement from relevant stakeholders came to a decision on a tentative Inception Workshop on April the 24th.

MOC will coordinate all project activities with other ministries in Vietnam. A Project Steering Board (PSB) will be established with the participation of key ministries (MONRE, MPI, MOST, MOIT, MOF). The Project Steering Board will coordinate the collaboration and sharing information within relevant ministries, and to support the development of NAMAs in Vietnam, in particular with the aim of examining how future NAMAs can be financed from domestic sources among others.

Beside MOC and other ministries it is crucial to involve VICEM and the Vietnamese Cement Association in the project to secure engagement, ownership and continuous focus on the NAMA concept within the Vietnamese cement industry. MOC will facilitate such collaborations with official letters, given a clear scope and template for reporting by the Consortium.

MOC should receive support from the Consortium in quarterly update of the project on Ministry homepage. Quarterly newsletters are also considered for distributing among stakeholders.

### MOC and the Consortium agree on the importance of domestic financing as a supplement to the international financing.. MONRE (25th March)

MONRE is in charge of the state management of NAMAs, and has been informed about the NAMA cement project during COP18. But at this stage MONRE could not give input to further development of the project. It was agreed to have a follow-up meeting for a more detailed discussion.

A number of NAMA initiatives being carried out in Vietnam and MONRE is in a process of developing 1) guidelines for a MRV framework; and 2) NAMA registry, as a follow up with Decision 1775 on emission control and carbon trading. This can only be shared with the consortium to a minor extent at this stage.

In regard to GHG inventory, MONRE is considering two models, either centralized (a national inventory office) and decentralized (inventory carried out for and by the individual sectors). MONRE would like to know more of how GHG emissions will be calculated for the cement sector and the methodology being used by the project. As soon as in place the Consortium will promote the sharing of this information.

*MOF (25th March)*

MOF confirmed interest in being more informed about the project. It was confirmed that neither policy on tax reduction nor incentives existed as a compensation to emission reduction efforts. However an enterprise could benefit from emission reductions when a new Decree on environmental protection fee levied on exhaust/flue gases would enter into force (probably by end of 2014 or in 2015).

On the access to financing, MOF informed that no direct support from the state budget could be expected and tax is the only financial mean that could be used. The loan guarantee could only be considered upon MOST's confirmation on new state of the art technology being used.

*MPI (25th March)*

Vietnam Green Growth Strategy (VGGS) is now in force after the formal approval by the Prime Minister in September 2012. Then the Green Growth Action Plan was approved in March 2014 and are now available only in Vietnamese. English version is under preparation and will be shared with the consortium once finalized. VGGS, which covers both Green Growth and Low Carbon Development, can be considered as the "umbrella" policy guiding different mitigation efforts including NAMAs in Vietnam. Each ministry shall develop its own action plan and relevant NAMA-like programs to reach the target on GHG intensity per GDP, and the ministries shall share data/project agenda/relevant reports with MPI for coordinating purpose, especially the supports from different donors in Vietnam..

For the NAMA cement Dr. Hoa of DOSTE/MOC is also a member of the VGGS Task Force so MPI expects a smooth collaboration with the Consortium. MPI will coordinate a workshop in April to launch the Green Growth Action Plan. DOSTE/MOC will be invited, so the NAMA cement (which is already in the VGGS Agenda) could be a topic for discussion.

MPI is preparing green growth investment guidelines to give instructions to line ministries. MPI will provide supports by mapping financing sources and each ministry should develop appropriate proposals to attract financing by itself, following the general agenda of GG.

*MOIT (25th March)*

MOIT is aware of the NAMA cement project. Some relevant projects are running with MOIT, e.g. ADB TA-7779, UNDP CCIT, and MOIT is collaborating with MPI on the WB Low Carbon Development Option Assessment (LCDOA) project.

MOIT has now proposed NAMAs in the steel and chemical industries. MOIT is collaborating with MONRE on GHG inventory work. However the baseline for mitigation options has not been agreed upon due to different base year applied.

Regarding cement industry, MOIT confirmed that the data used in TA-7779 were in line with Decision 1488 on cement development master plan.

*Vietnam Cement Industry corporation -VICEM (26th March)*

VICEM covers 45% of the installed capacity in cement production in Vietnam and approx. 35% share of the domestic market.

VICEM has already developed and implemented a Master Plan for energy and sustainable products both at VICEM group level and for each of its companies. GHG investments have mainly been Waste Heat Recovery (e.g. NEDO project in Ha Tien 2) and fuel-switch. The investments have been limited due to shortage of capitals and difficulties in financial arrangement (e.g. bank loan). Access to financing and high cost of low carbon investment are two major barriers. Projects with ROI less than 2 years could be considered for investment without pre-approval by VICEM. The ESCO model is expected to be applicable and appropriate for this difficult situation.

VICEM is aware of high emissions from the industry, both from energy use and from processing (limestone burning). Compliance on emissions was recently applied in some loans from Eurozone and could be integrated in the CSR/Environment Protection policy.

Regarding the inventory work it is a challenge to establish a uniform methodology throughout the sector, because various technologies are used meaning different levels of complexity and generations. It is appreciated that this can be included as part of this project.

VICEM is positive towards the project, but concrete actions in form of pilot projects can be an advantage to secure ownership and to illustrate the “UN requirements/process”. VICEM expects that the project could help addressing barriers in applying different emission-control and environmental initiatives, mainly from inconsistent policies (permission for burning waste in kiln, asset crediting, taxes, electricity consumption reduction quota etc.).

#### *Vietnam National Cement Association – VNCA (26th March)*

VNCA presented overview and open to share information. The industry at a size of 85 cement plants, about 60% of which are members of VNCA. Capacity range from 300 tpd (vertical type and converted type) up to 2500 tpd (rotary kiln, majority). Production in 2013 was estimated at 62 mt.

Technologies used at a medium-high level, close to BAT, e.g. 730 kcal/t clinker. However, actual operational practices are not always the best leading to higher energy consumptions (820-900 kcal/t clinker, 100 kWh/t cement). Emission control is not in the attention of most cement enterprises.

VNCA as the professional representative of cement-related companies collects production data monthly for newsletter that is distributed within the members of the Association. Data are provided by members or collected by sending data form.

Prioritized low carbon options could be WHR, however financial barriers (investment, access to financing) make it difficult to up-scale. Technical consulting capacity is lower than needed, lack of in-house knowledge on (optimized) operational consultancy. Social impacts (labour and local economy development) could also prevent the enforcement on emission control.

#### *Vietnam Association for Building Material – VABM (26th March)*

Development of cement industry in Vietnam follows Decision 1488 (Master Plan). Production capacity in 2013 is around 70 mt and could reach 73 mt in 2014. Actual production in 2013 was 61 mt, of which 14 mt for exporting.

In term of technology, it could be advanced ones (G7-based plants, mainly VICEM daughter companies) or Chinese based (medium high with 2500 tpd plants, and low with 1000 tpd and below). GHG emissions are from limestone burning and energy consumption. Quality of cements are not uniform and stable, due to low level of



automation system and operational parameter control, and due to the lack of an effective mining/mixing plan by each cement plant.

Following Decision 1488, WHR is compulsory for plants with the capacity from 2500 tpd, however so far only 3 plants having WHR. The main reason is the high costs for investment while low tariff applied to electricity sold to EVN. Other efforts to improve energy efficiency and reduce energy consumption are those from Holcim (new additives/slag for blending, waste burning) and VICEM (blending with fly ash).

VABM, in collaboration with VNCA, have recommended some urgent investment promoting options to the Government: (i) soft loan investments on energy efficiency and low carbon development; (ii) loan guarantee (difficult); (iii) localized design and manufacturing with component parts produced locally.

*Vietnam Polysius- part of ThyssenKrupp (26th March)*

Polysius presented different options for low carbon development in the cement sector, focussing more on process optimization and new innovation in technology (e.g. pyro-based kiln). Reductions in fuel consumption through the use of alternative fuels or waste burning were also discussed.

It was concluded that a good option for a fast success will be to focus on process optimisation, before considering separate investment options e.g. WHR.

*World Bank (27th March)*

Vietnam Low Carbon Options Assessment TA, Final Report of 26th March 2014 was circulated by involved institutions yesterday. WB will share this document.

WB is preparing a 100m investment lending project on EE with MOIT, which is still at concept definition stage and maybe it can cover Cement. This will be investigated and promoted further.

WB will furthermore investigate the carbon partnership facility for the scoping for pilot NAMA projects. Could the NAMA cement for the crediting part be of interest for the WB.

Being informed about the recent agreement between MONRE and METI on JCM, WB considered any NAMA MRV developed under different projects shall avoid overlapping and conflicting with that MRV requirement.

*ADB (27th March)*

ADB first involved in cement industry through TA-7024 in 2009 which was support MOIT on the VNEEP. The study includes surveys and energy audits of selected cement companies.

In 2010 ADB has offered a 90 million USD loan to implement EE measures in cement industry. The loan was mainly discussed with VICEM, however the loan options was not realized. One reason was that the energy is heavily subsidized in Vietnam in 2010.

ADB mentioned that this situation has changed and therefore the cement industry will be more interested now.

It was agreed to have a follow-up meeting with ADB person responsible for Energy efficiency within the next period.

*UNDP (27th March)*

UNDP does not have any activities in the cement sector. Recent effort in NAMA with MOIT in two sectors, steel and chemical (CCIT project). Other relevant activity includes supporting MPI in developing baseline and low carbon options for VGGS.

UNDP and consortium agreed to exchange information in the future, if needed.

*Ha Tien 1 Cement (28th March)*

The Ha Tien 1 is one of the more proactive companies in the actual low carbon development in the cement sector. However, the company's focus is not on the low carbon development, but rather the commercial benefit gained from activities to reduce carbon emissions. An implemented project is for instance fuel switch and it is technical functioning.

For new investment projects Ha Tien 1 is focusing on projects with a pay-back time of less than 1 year.

The Ha Tien 1 submits frequent reports to three different authorities. 1) An report concerning mainly environmental on a quarterly basis which is submitted to MONRE through DONRE, 2) a report on cement quality is submitted to MOC every 6 months and 3) a report related to energy which is submitted to MOIT every 12 months.

It was discussed that maybe a future GHG reporting system should be linked to already existing reports and furthermore it should be better linked to the submission to the line Ministry – MOC.

Ha Tien 1 expressed interest in being a pilot plant for testing the MRV through new investments. The consortium will explore this opportunity and revert after dialogue with MOC and potential donors.

*Tan Thang Cement (31st March)*

For a new investment with capacity of 5000 tpd in Quynh Luu, Nghe An province, Tan Thang Cement has selected latest technologies and key EPC contractors (Polysius, ABB, Loesche, Bedeschi, Haver Boeker) with consideration of low energy consumption as one of technological indicators for bidding.

Following Decision 1488, Tan Thang Cement also considers WHR and has conducted basic design before contracting a consultant for detailed design of WHR. Other options for low carbon emission include waste burning and emission control. Major barrier for implementing such options is financing, as with a floating interest rate of 13% then ROI would be around 7 years, then it will be very difficult to convince banking institution on the loan. Loan guarantee is also not secured due to low ROI and low electricity sale tariff exported to EVN.

Tan Thang Cement shows interest on a demonstration project and could help in connecting with different companies involved.

### **3 DESCRIPTION OF TASKS FROM THE PROJECT PROPOSAL WHICH REQUIRE FURTHER DETAILING**

*Effectiveness of contract*

MOC has informed that the contract has entered into force at the signing of the contract. It is the 27<sup>th</sup> January 2014.

*Stakeholder consultation after the draft Inception Report*

During the inception phase it has been recognized that there is a need for sharing the results from the inception phase with the stakeholders and furthermore an effort should be done to secure that even more potential stakeholders could be informed about the project. It is recommended to have an Inception workshop, to be held on Thursday 24

April 2014 using the reimbursable expense budget line 9.. The workshop should include for instance a presentation of the cement sector, an overview of the project, low carbon technologies,, MRV. and how it can be aligned with the cement sector. Afterwards a short gathering with some snacks – maybe around 40-50 participants. After the workshop. MOC will respond to the draft Inception Report and include remarks from the stakeholder consultation in the response.

*Mission(s) to Europe – two missions in 2014-2015 to Europe.*

Main purpose: For the development of the cement project it is important to built on experience from Europe and other global initiatives relating to low carbon development in cement sector because all the most important initiatives have an office in Europe.

Below is highlighted some important opportunities.

- Nordic partners, for instance in Helsinki, that have an in-depth understanding of the European Union Emission Trading Scheme (EU-ETS).
- Cement Sustainability Initiative (CSI) based in Switzerland. This meeting is important for setting-up an MRV system.
- ECRA, the European Cement Research Academy based in Germany for the practical aspects of MRV as well as low carbon technologies.
- Cembureau (European Cement Association). based in Belgium. This is important for in-depth understanding of the cement sector and MRV.
- International Emissions Trading Association (IETA) based in Switzerland. This is important for learning more about the the EU ETS and the carbon market.
- European Commission, DG Clima based in Belgium could be important source of information for the EU-ETS.

Participating at the Carbon Export could be a good idea to learn more about the carbon market and financial opportunities. The Carbon Expo - a two days conference focusing on low carbon development and carbon market - is expected to in May 2015 either in Germany or Spain. To start clarifying whether further financing can be attracted it would be good to identify potential sponsors in May 2015. This is still too early to have a concrete evaluation.

Based upon consultations with MOC, there will be two missions tentatively in September 2014 and May 2015. Participants from Vietnam in each mission are expected to be 3-4 representatives from MOC and Deputy Team Leader. Furthermore Bruno Vanderborght and NIRAS management team should participate in selected part of mission(s). All travel costs will be covered by item 10c of the reimbursable, withan indicate budget will be EURO 40,000 for two missions, but only actual and documented cost will be covered.

Detailed mission plans will be clarified with MOC before each mission.

*Access to data*

Probably the largest risk in the initial stage of the project is to have access to data and to have confidentiality agreements with companies. The consortium will work on this task as a priority but realistic there will be a need for support from highly respected Vietnamese stakeholders, especially from MOC to facilitate this. This activity shall be on-going from Ultimo April till September 2014. Contract can be signed with specific local

team proposed by MOC with an amount up-to EURO 10000, but this will dependent on the final agreed scope. The cost will be covered by item 10c of the reimbursable.

Reporting and translation

For all the products and sub-products it is expected that the reports will have a size of 30 - 40 pages. This is only an indicative size and it can be both more and less. If large deviation from this is expected it is indicated in the product or sub-products in the section in the work-plan.

For budget line 8 in the reimbursable expenses, FORM-FIN4 it is considered to the preparation of reports, translation to two languages, printing of all required reports and other relevant businesses. It should be considered as one unit of EUR 20,000. No budget is changed just a clarification and a more smooth administration.

It shall be highlighted that only products (key deliverables) will be translated to Vietnamese. The extra proposed sub-products will be in English and/or in Vietnamese. The Consortium will arrange within budget line 8 to translate sub-products if needed, however only executive summary and main contents will be covered.

Office administration

In the average it is expected that the monthly costs will be EUR 300 and it will include direct expenses to office services like paper, printer, coffee and representation at restaurants and so one.

Additional survey

A survey could cover Ha Tien 1 and Holcim .due to already on-going low carbon development projects. The main idea should be to get experience from already on-going low carbon projects in Vietnam. Additional survey EUR 15,000 from reimbursable budget line 10a in Form FIN-4. This is in line with this specific budget line.

Workshops

According to the reimbursable budget line it is possible to support 8 seminars/workshops and meetings. Based on consultations with MOC and NDF, the following 8 events will be considered. It should be noted that estimated budget for each event (except 0.2.2a and 0.2.2b which are no more supported) could be adjusted to reflect the actual situation but the total budget shall not exceed EUR 24,500.

Task	Content and time	Seminar, meeting, workshop, budget
<b>0.2.1.a</b> <b>0.2.1.b</b> <b>0.2.1.c</b> <b>0.2.1.d</b>	The coordination of project will be done by MOC with national authorities, MOC will decide the timing of meetings and/or workshop at a later stage.	Internal workshops and/or meetings Budget: EUR 3500
<b>0.2.2a</b> <b>0.2.2b</b>	International Advisory Group meetings, tentatively March 2015 and September 2015	Internal workshop and meeting Budget: EUR 0
<b>0.4.2</b>	Inception workshop, April 2014	Seminar/workshop Budget: EUR 3500
<b>II.1.1.</b>	Stakeholder consultation on the Baseline and mitigation scenarios, April 2015	Seminar/workshop Budget: EUR 3500

<b>II.1.2.</b>	Stakeholder consultation on the Preliminary Readiness Plan, June 2015	Seminar/workshop Budget: EUR 3500
<b>III.1.1b</b>	Workshop Authorities, October 2015	Seminar/workshop Budget: EUR 3500
<b>III.1.1c</b>	Workshop Industries, November 2015	Seminar/workshop Budget: EUR 3500
<b>III.2.3a</b>	Policy maker workshop on market policy mechanism, September 2015	Seminar/workshop Budget: EUR 3500
<b>Total</b>		<b>EUR 24,500</b>

Timing, content and participants of each event/meeting will be decided by MOC when appropriate and could be adjusted to reflect the actual project progress.

*Study tour for Cement Plants and public administration*

The management from the cement plants and public administration in Vietnam shall have the same understanding of the possibilities concerning climate mitigation in the cement sector and it is recommended to involve the management of the cement plants and the public administration in international climate mitigation events. Maybe it could be a group of 4-6 representatives from the cements plants and the public administration. According to Minutes of Meeting of 3 December 2013 (Appendix 6) this should be considered during the preparation of the Inception Report, however MOC and the Consortium have agreed to postpone a recommendation to the end of 2014 and it has also been decided by MOC to involve both cement plants and the public administration. The budget for such a study tour and related consultancy services are not covered by the actual contract.

*Further support to integrate the project and experience in the international climate negotiations and Cement networks/initiatives (including the participation in COP meetings).*

The project needs to be further developed before this issue can be further discussed and clarified. According to Minutes of Meeting of 3 December 2013 (Appendix 7) this should be considered during the preparation of the Inception Report. It is recommended to postpone a recommendation by MOC to the end of 2014. The budget for these potential services are not covered by the actual contract.

## **4 ORGANISATIONAL SET-UP OF CONSORTIUM AND COOPERATION WITH MOC**

The focal points for communication with MOC and the Nordic partners (NDF, NOAK and NEFCO) will be Team Leader (Morten Pedersen) and the Deputy Team Leader (Ha Dang Son).

Team Leader and Deputy Team Leader will support the team in developing the specific tasks and both Leaders can communicate and decide for specific tasks to secure the progress in case of lack of availability of the other leader.

The model will be that the leaders split the tasks between each other to have highest added value for project development. The leader dedicated for a specific task will be copied in in the communication connected to a specific task.

For each sub-task a team member will be appointed to secure the development and reporting of the specific sub-task. The team member will have the in-depth knowledge of topic and the team member will to a high degree coordinate the input from each expert allocated for the sub-task and within the allocated man-days for the sub-task.

The Team Leader or Deputy Team Leader will keep the MOC informed on a weekly basis either through a meeting or by e-mail. The main purpose is to give MOC a clear picture of the actual development of the project and the key challenges.

The Team Leader will invite member of the Consortium to a monthly meeting with a duration of 1½ hour with the purpose of exchange of information and overall coordination.

For each product handed in QA will be performed by leaders and in many cases together with appointed key-experts.

#### Language

All key products (deliverables) as listed in the service proposal will be handed in both in English and in Vietnamese.

There will be a number of sub-products provided with documentation, either in English or in Vietnamese (depending on the nature of specific sub-products). The Executive Summary of those sub-products will be translated into either Vietnamese or English.

The time-schedule is based on delivery of the product most often in Vietnamese and the delivery of final English product will be handed up to one week later. For few specialised products the English version will be handed in before the Vietnamese version, for instance the Inception Report.

#### Review, Approval and commenting

The products and sub-products will be forward by the Consortium to MOC for reviewing. The Consortium will incorporate the comments received by MOC and then submit a revised version of the products to MOC for final check before being forwarded to NDF for Letter of No Objection.

The Sub-products will go through a consultation process with relevant entities. The Consortium will incorporate comments and send to MOC for information.

#### Number and format

Electronic copy of both products and sub-products will be sent via email to both NDF and MOC.

For each product, both draft and final, the Consortium will also hand in 1 printed copy to MOC. When needed MOC can also request 2 extra copies of each product.

For each sub-product one copy will be handed in to MOC.

## **5 WORK PLAN**

This work-plan is fully in line with the objectives described in Chapter 1.

The chapter includes the work plan for the entire project and a more detailed work plan for the first quarter.

The work plan will be updated each quarter together with the preparation of the quarterly report.

In general the consortium have inserted significant more products than expected from the contracts in line with the proposal material. Basically all activities will have a specific product and this crucial for having a close interaction with MOC during the development of the project.

Each activity and (sub)product will follow the following model:

No	Responsible	Activity	Date
Unique reference number	Name	Often between 1-10 of the main activities connected a specific task	Period in the which the activity is performed
<b>Description</b>			
Contract clarification and negotiation			

No.	Responsible	Product	Date
Unique reference number (s)	Name	Name of products or sub-products	Specific date

And for a finalized task the delivered products will be illustrated in the following way.

Submitted Products
Name of the specific products which have been delivered

A mission will follow below model:

No	Person	Mission 1	Date
Unique reference number	Name	Country for mission	Specific period
<b>Description</b>			
A short description of purpose			

The colours from above illustrations will be used throughout this documents.

## 5.0 Phase 0 - Preparatory stage and continuous works

This phase includes three packages – 1) a contract clarification and contract negotiation mission in December 2013, 2) the inception phase March – May 2014 and the Continuous Works in the period May 2014 – March 2016.

### Task 0.1: Mobilizing the team, arranging a kick-off launch of the program

The following experts will be the main persons performing the task. Other experts will support were needed.

Key Personnel	
<i>Local team</i>	Ha Dang Son Nguyen Tuan Anh Le Anh Tung Dang Hanh Nguyen Hong Loan
<i>International team</i>	Morten Pedersen Rune Jørgensen

To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Responsible	Activity	Date
0.1.1	Morten Pedersen	Contract clarification and negotiation Facilitate common understanding of project between MOC and Consortium	December 2013
Description			
Contract clarification and negotiation			

No	Person	Mission 1	Date
0.1.1	Morten Pedersen	Mission to Vietnam	December 2013
Description			
Meetings with MOC			



No.	Responsible	Product	Date
P-0.1.1 a	Morten Pedersen	Minutes of meeting	December 2013
P-0.1.1 b		Agreed draft contract and detailed reimbursable budget.	

No	Person	Mission 2 – 10	Date
0.1.1	Morten Pedersen	Missions to Vietnam and other countries	2014 - 2016
<b>Description</b>			
<p>For this assignment the main part of the time should be spent abroad. Mainly in Vietnam and also International climate change events probably together with the staff from MOC.</p> <p>If possible the mission will be coordinate with the main milestone in the project and also so it will be joint mission with other international consultants.</p>			

No	Responsible	Activity	Date
0.1.2	Morten Pedersen	Team mobilization and preparation of inception report	Mar. – Apr. 2014
<b>Description</b>			
Preparation of Inception Report			

No	Person	Mission 11	Date
0.1.2 MOP	Morten Pedersen	Mission to Vietnam (Inception Phase and formal kick-off)	Mar. – Apr. 2014
<b>Description</b>			
<p>Preparation of Inception Report</p> <p>Meetings with stakeholders</p>			

No	Person	Mission 12	Date
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0.1.2 RUJ	Rune Jørgensen	Mission to Vietnam (Inception Phase and formal kick-off)	Mar. - Apr. 2014
<b>Description</b>			
Preparation of Inception Report Meetings with stakeholders			

No.	Responsible	Sub-product	Date
P-0.1.2 a	Morten Pedersen	Overview mission programme	April 2014
P-0.1.2 b		Minutes of meetings.	

Submitted Products (or Sub-products)
Overview of the mission programme (Appendix 6)

### Task 0.2: Supporting the meetings and interactions with Steering & Advisory Committee/Group

This task also includes missions by representatives by MOC to international and national meetings and missions.

The following experts will be the main persons performing the task. Other experts will support were needed.

Key Personnel	
<i>Local team</i>	Ha Dang Son Le Anh Tung
<i>International team</i>	Morten Pedersen Rune Jørgensen

To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Responsible	Activity	Date
0.2.1a -d	Ha Dang Son	Four meetings and/or internal workshop have been proposed by the Consortium.	Dec 2014
		The Consortium will participate in the	Jun 2015

		meetings and/or internal workshop, and prepare Minutes of meeting, if requested by MOC  Incorporate comments and prepare final Minutes of Meeting	Nov 2015 Feb 2016
<b>Description</b>			
The coordination of project will be done by MOC with national authorities,  At this stage four meetings and/or internal workshop have been proposed by the Consortium. The proposed timing is one meeting in 2014, two meetings in 2015 and one meeting in 2016  MOC will decide the number and timing of meetings and/or workshop at a later stage as it will follows the need in the project.  The meetings will be held with support from reimbursable budget line 9.			

No.	Responsible	Product	Date
P-0.2.1a-d	Ha Dang Son	Draft Minutes of Meeting and final Minutes of Meeting	Dec 2014
			Jun 2015
		Draft Minutes of Meeting and final Minutes of Meeting	Nov 2015
			Jan 2016

No	Responsible	Activity	Date
0.2.2a-b	Morten Pedersen	Support to a clarification of who will be in the International Advisory Group,	Mar. 2015
		Participate in two meeting and prepare Minutes of meeting, if requested	Sep. 2015
		Incorporate comments and prepare final Minutes of Meeting for two meetings	
<b>Description</b>			
Supporting interaction with the International Advisory Group (2 meetings expected in Vietnam and maybe one in a Nordic country). For the two meetings in Vietnam it is expected that the meeting will be held with support from reimbursable budget line 9.			

No.	Responsible	Product	Date
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P-0.2.2a-b	Morten Pedersen	Draft Minutes of Meeting and final Minutes of Meeting	Mar. 2015
		Draft Minutes of Meeting and final Minutes of Meeting	Sep. 2015

### Task 0.3: Facilitating broad stakeholder consultations

The consultation process is described in sections Task II 1 and Task II 2 and for easy reading the full description is in these sections.

### Task 0.4: Preparing Inception Report

The following experts will be the main persons performing the task. Other experts will support were needed.

Key Personnel	
<i>Local team</i>	Ha Dang Son
	Nguyen Tuan Anh
	Le Anh Tung
	Dang Hanh
	Nguyen Hong Loan
<i>International team</i>	Morten Pedersen
	Rune Jørgensen

To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Responsible	Activity	Date
0.4.1	Morten Pedersen	Prepare draft Inception Report	Mar 2014
		Incorporate comments from MOC and NDF in final Inception Report.	
Description			
Preparation and approval of Inception report.			

No.	Responsible	Product	Date
P-0.4.1	Morten Pedersen	Draft Inception Report	04.04.2014
		Final Inception Report	20.04.2014

No	Responsible	Activity	Date
0.4.2	Nguyen Tuan Anh	Prepare workshop, including arrange facilities, participants list and send out invitation.  Perform work-shop	April 2014
Description			
<p>During the Inception mission MOC has proposed that they would like to to have an inception workshop. It is proposed that the workshop should be Thursday 24.04.2014.</p> <p>The idea is to present the key findings from Inception report and also present the actual content of the project. The audience is expected to give valuable feedback.</p>			

No.	Responsible	Product	Date
P-0.4.2	Nguyen Tuan Anh	Workshop presenting the NAMA cement	23.04.2014

### Task 0.5: Preparing Progress Reports

The following experts will be the main persons performing the task. Other experts will support were needed.

Key Personnel	
<i>Local team</i>	Ha Dang Son  Le Anh Tung
<i>International team</i>	Morten Pedersen  Rune Jørgensen

To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Responsible	Activity	Date
0.5.1	Morten Pedersen	Prepare Q1 Progress Report  Incorporate comments from MOC and NDF and forward final Q1 Progress Report	April 2014
Description			
The quarterly report will probably be 5-6 pages. An updated work-plan will be enclosed.			

No.	Responsible	Product	Date
P-0.5.1a	Morten Pedersen	Draft Q1 Progress Report Final Q1 Progress Report	30.04.2014

No	Responsible	Activity	Date
0.5.2	Morten Pedersen	Prepare Q2 Progress Report Incorporate comments from MOC and NDF and forward final Q2 Progress Report	Jul. 2014
<b>Description</b>			
The quarterly report will probably be 5-6 pages. An updated work-plan will be enclosed.			

No.	Responsible	Product	Date
P-0.5.1b	Morten Pedersen	Draft Q2 Progress Report Final Q2 Progress Report	28.07.2014

No	Responsible	Activity	Date
0.5.3	Morten Pedersen	Prepare Q3 Progress Report Incorporate comments from MOC and NDF and forward final Q3 Progress Report	Oct. 2014
<b>Description</b>			
The quarterly report will probably be 5-6 pages. An updated work-plan will be enclosed.			

No.	Responsible	Product	Date
P-0.5.1c	Morten Pedersen	Draft Q3 Progress Report Final Q3 Progress Report	27.10.2014

No	Responsible	Activity	Date
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0.5.4	Morten Pedersen	Prepare Q4 Progress Report Incorporate comments from MOC and NDF and forward final Q4 Progress Report	Jan. 2015
<b>Description</b>			
The quarterly report will probably be 5-6 pages. An updated work-plan will be enclosed.			

No.	Responsible	Product	Date
P-0.5.1d	Morten Pedersen	Draft Q4 Progress Report Final Q4 Progress Report	26.01.2015

No	Responsible	Activity	Date
0.5.5	Morten Pedersen	Prepare Q5 Progress Report Incorporate comments from MOC and NDF and forward final Q5 Progress Report	Apr. 2015
<b>Description</b>			
The quarterly report will probably be 5-6 pages. An updated work-plan will be enclosed.			

No.	Responsible	Product	Date
P-0.5.1e	Morten Pedersen	Draft Q5 Progress Report Final Q5 Progress Report	27.04.2015

No	Responsible	Activity	Date
0.5.6	Morten Pedersen	Prepare Q6 Progress Report Incorporate comments from MOC and NDF and forward final Q6 Progress Report	Jul. 2015
<b>Description</b>			
The quarterly report will probably be 5-6 pages. An updated work-plan will be enclosed.			

No.	Responsible	Product	Date
P-0.5.1f	Morten Pedersen	Draft Q6 Progress Report Final Q6 Progress Report	31.07.2015

No	Responsible	Activity	Date
0.5.7	Morten Pedersen	Prepare Q7 Progress Report Incorporate comments from MOC and NDF and forward final Q7 Progress Report	Oct. 2015
<b>Description</b>			
The quarterly report will probably be 5-6 pages. An updated work-plan will be enclosed.			

No.	Responsible	Product	Date
P-0.5.1g	Morten Pedersen	Draft Q7 Progress Report Final Q7 Progress Report	30.10.2015

### Task 0.6: Preparing Completion Reports

The following experts will be the main persons performing the task. Other experts will support were needed.

<b>Key Personnel</b>	
<i>Local team</i>	Ha Dang Son Le Anh Tung
<i>International team</i>	Morten Pedersen Rune Jørgensen

To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Person	Activity	Date
0.6.1	Morten Pedersen	Prepare draft Completion Report Incorporate comments from MOC and NDF and forward final Completion Report	Jan. 2016
<b>Description</b>			



Mainly a summary of the tasks performed in the project period including a short evaluation and proposal for follow-up, if relevant.	
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No.	Responsible	Product	Date
P-0.6.1	Morten Pedersen	Draft Completion Report	10.01.2016
		Final Completion Report	31.01.2016

### Task 0.7: Additional Survey

No	Person	Activity	Date
0.7	Nguyen Tuan Anh	Mission to Ha Tien 1 and maybe Holcim.  Prepare report concerning low carbon projects at Ha Tien 1 and maybe Holcim	May - Jun 2014
Description			
A survey covering Ha Tien 1 and maybe Holcim should be performed. The main idea should be to get experience from already on-going low carbon projects in the cement sector in Vietnam. Additional survey EUR 15,000 from reimbursable budget line 10a in Form FIN-4. This is in line with this specific budget line. TOR and team will be agreed with MOC. Ha Tien 1 has confirmed interest. Only after the Inception Report it will be possible to clarify interest of Holcim.			

No.	Responsible	Product	Date
P-0.7.1	Nguyen Tuan Anh	Low carbon projects at Ha Tien 1 and Holcim	15.06.2014

### Task 0.8: Mission(s) to Europe

No	Person	Activity	Date
0.8	Morten Pedersen	Mission (s) to Europe  Content will be clarified later.	May 2015
Description			
In May 2015 the project is well-developed and it is time for a clarification of the final set-up of the NAMA and also to seek funds for continuation of the project.  May 2015 is proposed as it can combine the Carbon Expo with other			

potential visits. For instance CSI, ECRA, IETA and so on.	
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No.	Responsible	Product	Date
P-0.8.1	Morten Pedersen	Performed mission to Europe and mission report	15.06.2014

## 5.1 Phase I -Design stage

May 2014 – May 2015

### Task I.1: Overview of relevant policies, processes, initiatives and stakeholders

The following experts will be the main persons performing the task. Other experts will support were needed.

Key Personnel	
<i>Local team</i>	Nguyen Tuan Anh Nguyen Hung Quang Dang Hanh Ha Dang Son
<i>International team</i>	Morten Pedersen Bruno Vanderborght Justine Sefton

To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Responsible	Activity	Date
I.1.1	Nguyen Tuan Anh	Dialogue with main stakeholders Gather and review all related information on policies, laws, regulations, industry road maps, targets, fuel mix, forecasts, performance benchmarks, incentive mechanisms for the cement industry in Vietnam	May 2014
Description			
Listing and description of relevant laws, regulations and incentives (incl. process for existing and new cement plants)			

No.	Responsible	Sub-product	Date
P-I.1.1	Nguyen Tuan Anh	Overview of the Cement Sector	25.05.2014

No	Responsible	Activity	Date
I.1.2	Nguyen Tuan Anh	Analysis of the relevant regulations, focus on overall framework, streamlining and gaps.  Compare Vietnam with two selected countries	May 2014
<b>Description</b>			
Analyses of relevant legislation and regulation in Vietnam with a comparison with legislation and regulation in selected countries			

No.	Responsible	Sub-product	Date
P-I.1.2	Nguyen Tuan Anh	Analyses of the actual situation of the Cement sector in Vietnam	25.05 .2014

No	Responsible	Activity	Date
I.1.3	Nguyen Tuan Anh	Identify the key stakeholders based on dialogue with MOC and the cement industry.  Each stakeholder should be described and contact details should be gathered.	May 2014
<b>Description</b>			
Listing and description of key stakeholders to be engaged in the Design Stage.			

No.	Responsible	Sub-product	Date
P-I.1.3	Nguyen Tuan Anh	Description of key stakeholders. A note of 10 pages.	19.05.2014

### **Task I.2: Identification and collection of relevant data**

The following experts will be the main persons performing the task. Other experts will support were needed.

<b>Key Personnel</b>	
<i>Local team</i>	Ha Dang Son Nguyen Tuan Anh Nguyen Tien Hai Tran Minh Tuyen Dang Hanh
<i>International team</i>	Morten Pedersen Bruno Vanderborght Axel Michaelowa

To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Responsible	Activity	Date
I.2.1	Axel Michaelowa	Present different options for emission and project boundary. Discussion of relevance of these options Recommendation for boundary for the project and emission	May 2014
Description			
Determination of justified emissions boundary for Pilot Programme (activities and emission sources)			

No.	Responsible	Sub-product	Date
P-I.2.1	Axel Michaelowa	NAMA cement - Project and Emission Boundary	31.05.2014

No	Person	Mission 13	Date
1.2.2 BV	Bruno Vanderborght	Mission to Vietnam (preparation of task 1.2.2)	Jun. - Jul.-2014
Description			
Preparation of P-I.2.2 and support to other tasks for instance P-1.2.4.			

Meetings with stakeholders	
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No	Responsible	Activity	Date
I.2.2	Bruno Vanderborght	Present and discuss pros/cons of existing MRV systems in the cement sector.  Present and discuss pros/cons of existing MRV systems in the EU-ETS.  Present and discuss the different calculation tools.  Define preliminary data input	May – Jul. 2014
<b>Description</b>			
Definition of necessary dataset and ideal dataset and associated calculation methods and formulas for determining sector-level emissions and mitigation potential			

No.	Responsible	Sub-Product	Date
P-I.2.2	Bruno Vanderborght	Data set guidelines and calculation methodologies	11.07.2014

No	Responsible	Activity	Date
I.2.3	Dang Hanh	Describe and evaluate the data availability and quality  Describe and evaluate the traceability and quality  Describe and evaluate the data gathering system  Any possibility for improvement shall be noted.	May and Jul. 2014
<b>Description</b>			
Assessment of availability and quality of the data required for determining sector-level emissions and mitigation potential. The activity will build upon Mission 13.			

No.	Responsible	Sub-product	Date
P-I.2.3	Dang Hanh	Assessment of availability and quality of the	29.07.2014

		data	
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No	Responsible	Activity	Date
I.2.4	Dang Hanh	Compare the ideal data set with the available data set.  Describe the gaps  Present different scenarios of how to overcome these gaps and with recommendation.(in the form of a 2 page TOR)	Sep. 2014
<b>Description</b>			
Identifying data gaps for necessary and ideal datasets and proposing solutions to fill the gaps			

No.	Responsible	Sub-product	Date
P-I.2.4	Dang Hanh	Gap analyses	26.09.2014

No	Responsible	Activity	Date
I.2.5	Tran Minh Tuyen	Prepare confidentiality agreement with cement companies  Propose a model for data gathering and a transparent way to save this information  Collect all available data and place all data in a common database	Jul. - Oct. 2014
<b>Description</b>			
Collection of the available data and of missing items of necessary dataset			

No.	Responsible	Sub-product	Date
P-I.2.5	Tran Minh Tuyen	Overview of available data	29.10.2014

No	Responsible	Activity	Date
I.2.6	Tran Minh Tuyen	Develop database	Aug. - Oct. 2014

		Insert data in database	
<b>Description</b>			
Setting up of a database system (incl. first version of database) to be used by the project			

No.	Responsible	Product	Date
P-I.2.6a	Tran Minh Tuyen	Present a model for the emission boundary, main calculation indicators and metrics to be applied	27.10.2014
P-I.2.6b		Compare the three international options with the Vietnamese reality and make a recommendation,	
P-I.2.6c		Prepare a template for GHG database	
P-I.2.6d		First version of database	

### Task I.3: Development of baseline emission trends for the cement sector

The following experts will be the main persons performing the task. Other experts will support were needed.

<b>Key Personnel</b>	
<i>Local team</i>	Ha Dang Son Nguyen Tuan Anh Tien Hai Tran Minh Tuyen Dang Hanh
<i>International team</i>	Morten Pedersen Bruno Vanderborght Axel Michaelowa Stefan Wehner

To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Responsible	Activity	Date
I.3.1	Stefan	Develop historical trends of the emissions	Sep. – Nov.

	Wehner	Development of the future CO2 emission trends	2014
<b>Description</b>			
Identifying the historical trend of the emissions included in the scope of the Pilot Programme and determinants of these emissions			

No.	Responsible	Sub-product	Date
P-I.3.1	Stefan Wehner	Trends of emissions	21.11.2014

No	Responsible	Activity	Date
I.3.2	Bruno Vanderborght	Describe and discuss different approaches for baseline setting.  Different BAU scenarios shall be developed.  BAT, BAP or State of the Art scenarios shall be developed	Dec. 2014
<b>Description</b>			
Determining the range of baseline projections for cement sector emissions, based on production level and emission intensity scenarios			

No.	Responsible	Sub-product	Date
P-I.3.2	Bruno Vanderborght	Baseline projection study	19.12.2014

No	Responsible	Activity	Date
I.3.3a	Bruno Vanderborght	Quantify different reference levels.	Dec. 2014 – Jan. 2015
1.3.3.b		Comparison between the Vietnamese standard and different crediting systems.	
<b>Description</b>			
Identification and discussion on issues related to setting the reference level for receiving international support and/or carbon credits			



No.	Responsible	Sub-product	Date
P-I.3.3a	Bruno Vanderborght	Different reference levels.	26.01.2015
P-I.3.3b		Comparison study	

No	Responsible	Activity	Date
I.3.4	Stefan Wehner	Present different option, but with a recommendation for regular update of the database.	Jan. 2015
Description			
Recommending procedures and international requirements for management and revision of baseline database			

No	Person	Mission 14	Date
1.3.4 SW	Stefan Wehner	Mission to Vietnam (preparation of task 1.3.4)	Dec. 2014 – Jan. 2015
Description			
Preparation of P-I.3.4 Meetings with stakeholders			

No.	Responsible	Sub-product	Date
P-I.3.4	Stefan Wehner	Report Recommendation to procedures and international requirements for management and revision of baseline database	26.01.2015

#### Task I.4: Setting up of sector-level MRV system of international standard

The following experts will be the main persons performing the task. Other experts will support were needed.

Key Personnel	
<i>Local team</i>	Dang Hanh Ha Dang Son Nguyen Tuan Anh

<i>International team</i>	Tran Minh Tuyen
	Nguyen Tien Dinh
	Morten Pedersen
	Bruno Vanderborght
	Axel Michaelowa

To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Responsible	Activity	Date
I.4.1	Axel Michaelowa	Identify existing MRV systems and procedures and ability to measure  Variation based on technical issues and production facilities	Aug. – Sep. 2014
<b>Description</b>			
Identification of current MRV systems and procedures in cement companies in Vietnam consistent with actual data availability			

No	Person	Mission 15	Date
1.4.1 AM	Axel Michaelowa	Mission to Vietnam (preparation of task 1.4.1)	Aug. 2014
<b>Description</b>			
Preparation of P-I.4.1 and support to other tasks.  Meetings with stakeholders			

No.	Responsible	Sub-product	Date
P-I.4.1.	Axel Michaelowa	Current MRV systems and procedures in cement companies in Vietnam	26.09.2014

No	Responsible	Activity	Date
I.4.2	Bruno Vanderborght	Recommendation for improving the MRV practices including QA/QC	Nov. 2014

<b>Description</b>			
Assessment of availability and quality of the data required for determining sector-level emissions and mitigation potential			

No	Person	Mission 16	Date
1.4.2 BV	Bruno Vanderborght	Mission to Vietnam (preparation of task 1.4.2 and support to other tasks)	Nov. 2014
<b>Description</b>			
Preparation of D-I.4.2 and support to other tasks, for instance Meetings with stakeholders			

No.	Responsible	Sub-product	Date
P-I.4.2.	Bruno Vanderborght	Recommendation for improving MRV practices.	25.11.2014

No	Responsible	Activity	Date
I.4.3	Dang Hanh	Clarify and propose roles and responsibilities for MRV	Dec. 2014
<b>Description</b>			
Proposing appropriate institutional arrangements for MRV			

No.	Responsible	Sub-product	Date
P-I.4.3.	Dang Hanh	Appropriate institutional arrangements for MRV	19.12.2014

No	Responsible	Activity	Date
I.4.4	Axel Michaelowa	Establish a MRV system Prepare training material	Dec. 2014 – Jan. 2015

Description	
Establishment of an MRV system for regular measurement, reporting and verification of the relevant emissions	

No.	Responsible	Product	Date
P-I.4.4a	Axel Michaelowa	MRV system design	19.01.2015
P-I.4.4b		Respective capacity building material	28.01.2015

**Task I.5: Assessment of mitigation potential, costs barriers and policy options**

The following experts will be the persons for the task supported by other experts and personnel.

Key Personnel	
<i>Local team</i>	Ha Dang Son Nguyen Tuan Anh Nguyen Hung Quang Dang Hanh Nguyen Tien Hai
<i>International team</i>	Morten Pedersen Bruno Vanderborght Axel Michaelowa Justine Sefton Ingo Puhl Stefan Wehner

To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Responsible	Activity	Date
I.5.1a	Nguyen Tuan Anh	Assess the policies and regulations in Vietnam.	May – Jun. 2014
Description			
Assessment of current and planned policies relevant to Vietnam’s cement sector having connection to emissions of the cement sector emissions in Vietnam			

No.	Responsible	Sub-product	Date
P-I.5.1a	Nguyen Tuan Anh	Current and planned policies	28.06.2014

No	Responsible	Activity	Date
I.5.1b	Justine Sefton	Assess the policies and regulations in other countries  Present case study  Evaluate what can be used in a Vietnamese context.	May - Jun. 2014
<b>Description</b>			
Assess the policies and regulations in other countries and evaluate whether it can be used in a Vietnamese context.			

No	Person	Mission 17	Date
1.5.1 JS	Justine Sefton	Mission to Vietnam (preparation of task 1.5.1b)	May - Jun 2014
<b>Description</b>			
Preparation of P-I.5.1  Meetings with stakeholders			

No.	Responsible	Sub-product	Date
P-I.5.1b	Justine Sefton	Current and planned policies in several countries	28.06.2014

No	Responsible	Activity	Date
I.5.2	Ha Dang Son	Describe and justify the most important mitigation options.  Clarify whether these options are the most relevant for cement sector - for by comparing studies and site visits.	Nov. - Dec. 2014

Description	
Identification of various mitigation action from Vietnam's cement sector	

No.	Responsible	Sub-product	Date
P-I.5.2	Ha Dang Son	Various mitigation action for the cement sector	19.12.2014

No	Responsible	Activity	Date
I.5.3	Stefan Wehner	Prepare the marginal abatement curves	Dec. - Jan. 2014

Description	
Marginal abatement cost (MAC) curve for identified actions	

No	Person	Mission 18	Date
1.5.3 SW	Stefan Wehner	Mission to Vietnam (preparation of task 1.5.2)	Dec - Jan 2014

Description	
Preparation of P-I.5.3 Meetings with stakeholders	

No.	Responsible	Sub-product	Date
P-I.5.3	Stefan Wehner	Marginal abatement cost	28.01.2015

No	Responsible	Activity	Date
I.5.4	Bruno Vanderborght	Identification of the different barriers Different tools will be used to analyses the different barriers. Group the different barriers.	Feb. 2015
Description			

Identification of relevant barriers to up-scaled mitigation action in the cement sector	
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No.	Responsible	Sub-product	Date
P-I.5.4	Bruno Vanderborght	Barriers to up-scaled mitigation action	28.02.2015

**Task I.6: Options for matching policy toolkit with NAMA support**

The following experts will be the main persons performing the task. Other experts will support were needed.

<b>Key Personnel</b>	
<i>Local team</i>	Nguyen Hung Quang Dang Hanh Nguyen Tuan Anh
<i>International team</i>	Morten Pedersen Bruno Vanderborght Justine Sefton Ingo Puhl Axel Michaelowa

To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Responsible	Activity	Date
I.6.1	Ingo Puhl	Present the different NAMA options. Describe and recommend suitable NAMA options with focus in the requirements	Jan. 2015
Description			
Definition of the type and requirements of the NAMA to be established that takes into account the NAMA lessons in other countries and also ensure that the results from the baseline setting exercise as well as the political economy analysis (which policy instruments are actually available) will be reflected.			

No	Person	Mission 19	Date
1.6.1 IP	Ingo Puhl	Mission to Vietnam (preparation of task 1.6.1)	Jan. 2015
Description			
Preparation of P-I.6.1 and support to other tasks. Meetings with stakeholders			

No	Person	Mission 20	Date
1.6.1 AM	Axel Michaelowa	Mission to Vietnam (preparation of task 1.6.1)	Jan. 2015
Description			
Preparation of P-I.4.1-4 and support to other I.4 tasks. Meetings with stakeholders			

No.	Responsible	Sub-product	Date
P-I.6.1	Ingo Puhl	Type and requirements of the NAMA	28.01.2015

No	Responsible	Activity	Date
I.6.2	Ingo Puhl	Perform gap analyses Describe different policy options and shortlist these together with MOC Conceptual design for a NAMA	Jan. 2015 – Mar. 2015
Description			
Design of a conceptual framework for the design of a NAMA			

No.	Responsible	Product	Date
P-I.6.2	Ingo Puhl	Draft NAMA framework	28.03.2015



No	Responsible	Activity	Date
I.6.3	Nguyen Tien Dinh	Prepare a NAMA institutional framework Prepare a proposal for a NAMA operational arrangements.	Mar. 2015
Description			
Description of the institutional requirements for coordinating policy options under the possible NAMA			

No.	Responsible	Product	Date
P-I.6.3	Nguyen Tien Dinh	Institutional requirements for the possible NAMA	28.03.2015

**Task I.7: Identification of potential national and international financial resources**

The following experts will be the main persons performing the task. Other experts will support were needed.

Key Personnel	
<i>Local team</i>	Dang Hanh Nguyen Tuan Anh
<i>International team</i>	Morten Pedersen Bruno Vanderborght Ingo Puhl

To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Responsible	Activity	Date
I.7.1	Ingo Puhl	Present and analyse domestic public finance Present and analyse domestic and international private finance Multilateral and bilateral development finance Climate finance and climate market finance	Jun. 2014
Description			

Analysis of existing financing sources	
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No.	Responsible	Sub-product	Date
P-I.7.1.	Ingo Puhl	Existing financing sources	28.06.2014

No	Responsible	Activity	Date
I.7.2	Ingo Puhl	Prepare cash-flow models  Different options will be presented in the models.  Benchmarking the financial need  Propose a financial structure of the NAMA	Feb. – Mar. 2015
<b>Description</b>			
Estimation of financing needs of the NAMA and definition of financing structure			

No.	Responsible	Sub-product	Date
P-I.7.2.a	Ingo Puhl	Simple excel-based cash flow model	05.03.2015
P-1.7.2.b		Financing need and structure	10.03.2015

No	Responsible	Activity	Date
I.7.3	Dang Hanh	Describe and analyse the different options in the carbon market, for instance CDM and so on  Develop a proposal for how to integrate the NAMA design into the international carbon market. Different NAMA options will be presented and analysed	Feb. - Mar. 2015
<b>Description</b>			
Design of a concept to introduce the carbon market in the NAMA including the interaction between CDM and NAMA and the possibilities of NAMA crediting or trading activities			

No.	Responsible	Sub-product	Date
P-I.7.3	Dang Hanh	NAMA – combined with the Carbon Market	10.03.2015

No	Responsible	Activity	Date
I.7.4	Nguyen Tuan Anh	Review and map on-going initiatives  Identify possible future programmes in the planning stage  Recommendation of the future coordination	Mar. 2015
<b>Description</b>			
Relationship with other activities			

No.	Responsible	Sub-product	Date
P-I.7.4	Nguyen Tuan Anh	Programmes/projects relevant for the NAMA cement project.	20.03.2015

No	Responsible	Activity	Date
I.7.5	Ingo Puhl	Prepare a proposal for the NAMA financing plan  Perform meetings together with MOC to present and discuss the NAMA programme.  Integrate remarks form the consultation to the NAMA financial plan.	Mar. - Apr. 2015
<b>Description</b>			
Setting up financial plans for NAMA programme in cooperation with the relevant ministries			

No	Person	Mission 21	Date
1.7.5 IP	Ingo Puhl	Mission to Vietnam (preparation of task 1.7.5 and other 1.7 tasks mainly)	Mar 2014
<b>Description</b>			
Setting-up financial plan for the NAMA.			

Preparation of P-I.7.5 and support to other tasks.	
Meetings with stakeholders	

No.	Responsible	Sub-product	Date
P-I.7.5	Ingo Puhl	Setting-up financial plan for the NAMA.	28.04.2015

### Task I.8: Preparation of stakeholder map and plan

The following experts will be the persons for the task supported by other experts and personnel.

Key Personnel	
<i>Local team</i>	Ha Dang Son Nguyen Tuan Anh Nguyen Hong Loan Nguyen Tien Dinh
<i>International team</i>	Morten Pedersen Bruno Vanderborght Manuel Cocco

To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Responsible	Activity	Date
I.8.1	Manual Cocco	Based on the overview in I.1.3 and the analyses until the map will be developed. Prepare a matrix	Dec 2014 – Jan 2015 and Apr. 2015
Description			
Preparing stakeholder map and plan identifying relevant stakeholders for the Consultation Stage and issues to be discussed			

No.	Responsible	Sub-product	Date
P-I.8	Manual Cocco	Stakeholder map and Consultation plan	30.04.2015

### Task I.9: Preparation of baseline and options study and preliminary readiness plan

The following experts will be the main persons performing the task. Other experts will support were needed.

Key Personnel	
<i>Local team</i>	Ha Dang Son Nguyen Tuan Anh Dang Hanh Tien Hai
<i>International team</i>	Morten Pedersen Bruno Vanderborght

To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Responsible	Activity	Date
I.9.1	Ha Dang Son	Identify key targets and action points based on based on the already developed products and sub-products.  Present the work in summarized report	Feb. – Mar. 2015
Description			
<p>Preparing a baseline and options study. This is basically a summary of the already finalized products and sub-products, which will be presented in a systematic way. Probably the product should be 40 pages plus appendices.</p> <p>When assessing the baseline for mitigation options, it is important to take into account the final Vietnam 2010 GHG Emission Baseline (energy) - submitted to MOIT in late 2013 within the scope of TA-7779 project funded by NDF via ADB - and at other potentially relevant material prepared in this project.</p>			

No.	Responsible	Product	Date
P-I.9.1	Ha Dang Son	Baseline and options study	28.03.2015

No	Responsible	Activity	Date
I.9.2	Morten Pederson	Prepare a preliminary readiness plan with the focus on the following activities.	Apr. – May 2015

	<p>1 ) Status report of work done thus far</p> <p>2) Summary of Baseline and Options Study</p> <p>3) Consultation Stage Plan,</p> <p>4) Status and needs and recommended action for</p> <p>5) Market potential study</p> <p>Data, baselines and MRV</p> <p>Training and capacity building</p> <p>Policy and institutional development</p> <p>Financing</p> <p>Barrier removal and</p> <p>5) NAMA structuring</p>	
<b>Description</b>		
<p>Preparing a preliminary readiness plan. The activities are mainly a presentation of the already performed products and sub-products. The readiness plan is expected to be around 40 pages.</p> <p>The presentation will focus on status and needs and recommended action, and identify other broad policy instruments which may influence emissions and whether or not a reduction in the direct support from the state budget to fossil fuel could play a role in the cement (and other) sector.</p>		

No.	Responsible	Product	Date
P-I.9.2	Morten Pedersen	Draft readiness plan	28.05.2015

## 5.2 Phase II -Consultation stage

April – July 2015

### **Task II.1: Identification and consultation of key national stakeholders on relevant sections of the preliminary readiness plan**

The following experts will be the persons for the task supported by other experts and personnel.

<b>Key Personnel</b>	
<i>Local team</i>	Ha Dang Son

<i>International team</i>	Nguyen Hong Loan
	Nguyen Tien Dinh
	Le Anh Tung
	Morten Pedersen
	Bruno Vanderborght
	Manuel Cocco

To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Responsible	Activity	Date
II.1.1	Manuel Cocco	Stakeholder consultation - workshop 1 Information campaign using different media Prepare training and capacity plan and present at stakeholder meeting	Apr. 2015
Description			
Stakeholder consultation and workshop The meetings will be held with support from reimbursable budget line 9.			

No	Person	Mission 22	Date
II.1.1 MC	Manuel Cocco	Mission to Vietnam (focus on first stakeholder consultation in form of workshop and other tasks to be defined)	Apr 2015
Description			
Preparation of P-II.1.1 and support to other tasks. Meetings with stakeholders			

No.	Responsible	Product	Date
P-II.1.1.a	Nguyen Tien Dinh	Performed stakeholder workshop	26.04.2015
P-	Manuel Cocco	First Stakeholder consultation report	

II.1.1b		Draft training and capacity plan	
P- II.1.1c		Final training and capacity plan	
P- II.1.1d		Short memo of activity and results information campaign	

No	Responsible	Activity	Date
II.1.2	Manuel Cocco	Stakeholder consultations and workshop. Information campaign using different media.	Jun. 2015
Description			
Stakeholder consultation and workshop. The meeting will be held with support from reimbursable budget line 9.			

No	Person	Mission 23	Date
II.1.2 MC	Manuel Cocco	Mission to Vietnam (focus on second stakeholder consultation and other tasks to be defined)	Jun 2015
Description			
Preparation of P-II.1.2 and support to other tasks. Meetings with stakeholders			

No.	Responsible	Product	Date
P-II.1.2 a	Manuel Cocco	Second Stakeholder consultation report	26.06.2015
P- II.1.2b		Short memo of activity and results information campaign	

### Task II.2: Preparation of final readiness plan based on the consultations

The following experts will be the main persons performing the task. Other experts will support were needed.

Key Personnel	
<i>Local team</i>	Ha Dang Son



<i>International team</i>	Morten Pedersen  Bruno Vanderborght
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To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Responsible	Activity	Date
II.2.1	Ha Dang Son	Status report of work done this far	Jul. 2015
<b>Description</b>			
Status report of work done this far. Only a few page note to highlight the development during the stakeholder consultation period.			

No.	Responsible	Product	Date
P-II.2.1	Ha Dang Son	Status Report - 5 page note	10.07.2015

No	Responsible	Activity	Date
II.2.2	Ha Dang Son	Evaluate whether information received during the stakeholder consultation will require adjustments in the summary baseline and option study described in the readiness plan.	Jul. 2015
<b>Description</b>			
Evaluate whether information received during the stakeholder consultation will require adjustments in the summary baseline and option study described in the readiness plan. Probably a 5 page note which should be taken into consideration of the final readiness plan.			

No.	Responsible	Product	Date
P-II.2.2	Ha Dang Son	Note for adjustments in the summary of baseline and options study presented in draft Readiness plan	10.07.2015

No	Responsible	Activity	Date
II.2.3	Manuel Cocco	Prepare a note with recommendation of future activities based on the consultation workshops, which is not included in the scope of this assignment	Jul. 2015

Description	
Summary of status and needs, recommended actions and relevant stakeholders	

No.	Responsible	Product	Date
P-II.2.3	Manuel Cocco	Recommendation for further activities	30.07.2015

No	Responsible	Activity	Date
II.2.4	Dang Hanh	Update the financial plan based on the remarks from the two stakeholder consultations.	Jun. - Jul. 2015

Description	
Final financial plan for NAMA programme in cooperation with the relevant ministries	

No.	Responsible	Product	Date
P-II.2.4	Dang Hanh	Final financial plan	10.07.2015

### 5.3 Phase III -Readiness stage

This project phase covers August 2015 to March 2016

#### Task III.1: Training and capacity building

The following experts will be the persons for the task supported by other experts and personnel.

Key Personnel	
<i>Local team</i>	Ha Dang Son Nguyen Hong Loan Nguyen Tien Dinh
<i>International team</i>	Morten Pedersen Bruno Vanderborght Manuel Cocco

To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Responsible	Activity	Date
III.1.1	Manuel Cocco	Prepare training materials for two workshops (in English)	Sep - Dec 2015
	Nguyen Tien Dinh	Prepare and perform a one-day workshop for authorities  Prepare and perform a one-day workshop for industries	
Description			
Launching and implementing the training and capacity building plan included in the final readiness plan. Two training courses anticipated and with a unit cost according to budget line 9 reimbursable, FORM FIN-4. It is anticipated that one workshop with the authorities and one workshop with the industry.			

No.	Responsible	Product	Date
P-III.1.1a	Manuel Cocco	Capacity building plan and training material (in English)	18.10.2015
P-III.1.1b	Nguyen Tien Dinh	Workshop for authorities	24.10.2015
P-III.1.1c		Workshop for industries	11.11.2015

### Task III.2: Providing support for policy-makers in Vietnam

The following experts will be the main persons performing the task. Other experts will support were needed.

Key Personnel	
<i>Local team</i>	Nguyen Tuan Anh Nguyen Hung Quang Nguyen Tien Dinh
<i>International team</i>	Morten Pedersen Bruno Vanderborght Justine Sefton

To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Responsible	Activity	Date
III.2.1	Nguyen Tuan Anh	Select 5 cement companies in cooperation with MOC.  Perform 5 meetings in total with the selected industries and prepare minutes of meeting. If further follow-up is needed it will be agreed with MOC	Aug. – Oct. 2015
<b>Description</b>			
Collection and analysis of further data needs to inform the policy-makers. No extensive primary data collection is expected. It is proposed to conduct in total 5 meetings with cement plants for explain the project in more detail and clarify whether new adjustments is needed in the on-going work. It can in parallel be seen as promotion activity. If further follow-up is needed it will be agreed with MOC.			

No	Person	Mission 24	Date
III.2.1 BV	Bruno Vanderborght	Mission to Vietnam (preparation of task III.2	Oct 2015
<b>Description</b>			
Preparation of P-III.2.1 and other task in III  Meetings with stakeholders			

No.	Responsible	Product	Date
P-III.2.1a	Nguyen Tuan Anh	Note – selection of 5 cement companies	18.09.2015
P-III.2.1b		5 Minutes of meeting	01.10.2015 – 20.10.2015

No	Responsible	Activity	Date
III.2.2	Tran Minh Tuyen	Prepare a simple excel-based spreadsheet with step by step instructions	Sep. – Nov. 2015
<b>Description</b>			

Preparation of a “baseline toolkit” for estimating plant-level baseline	
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No.	Responsible	Product	Date
P-III.2.2	Tran Minh Tuyen	Plant-level baseline calculator	18.11.2015

No	Responsible	Activity	Date
III.2.3	Nguyen Tien Dinh	Prepare a half day workshop for policy makers 5 meetings with selected policy makers	Aug. - Nov. 2015
Description			
Analysis of design options for existing and new market mechanisms in the cement sector of Vietnam. This is mainly focused on a half-day workshop for policy makers. Supplementary it is offered to include 5 meetings with different policy makers.			

No.	Responsible	Product	Date
P-III.2.3a	Nguyen Tien Dinh	½ day workshop	25.9.2015
P-III.2.3b		5 minutes of meetings	

No	Responsible	Activity	Date
III.2.4	Axel Michaelowa	Prepare a simple guide “how to design NAMA and MRV”.	Sep. 2015 - Nov. 2015
Description			
Setting up of a national system for designing NAMAs and related MRV. Basically a simple guide on how to prepare a NAMA and related MRV. The guide will probably be around 20 pages.			

No.	Responsible	Product	Date
P-III.2.4	Axel Michaelowa	“How to design NAMA and MRV”.	30.11.2015

No	Responsible	Activity	Date
III.2.5	Dang Hanh	Prepare a proposal for how sector-level MRV can be linked to MRV for the specific cement plant	Nov. - Dec. 2015
Description			
Setting up of national MRV system which enables Vietnam to match the sector-level support to plant-level mitigation action. Prepare a proposal for how sector-level MRV can be linked to MRV for the specific cement plant			

No.	Responsible	Product	Date
P-III.2.5	Dang Hanh	“Proposal for how to link sector level MRV with the specific Cement Plant”	19.12.2015

No	Responsible	Activity	Date
III.2.6	Ha Dang Son	Prepare information note concerning ESCO  Perform at least 5 meetings with potential investors in ESCO	Nov. - Dec. 2015
Description			
Supporting stakeholder coordination and possible set-up of intermediary institutions such as energy service companies (ESCOs). It will be finally decided during the consultation phase. The main output should be through bilateral meetings to secure and focused and open effort.			

No.	Responsible	Product	Date
P-III.2.6a	Ha Dang Son	Information note concerning ESCO	19. 12.2015
P-III.2.6b		5 minutes of meeting	19.12.2015

**Task III.3: Final NAMA cement readiness report**

The following experts will be the main persons performing the task. Other experts will support were needed.

Key Personnel	
<i>Local team</i>	Ha Dang Son

<i>International team</i>	Morten Pedersen  Bruno Vanderborght
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To carry out the task the following activities and missions will be performed and related products and sub-products will be delivered.

No	Responsible	Activity	Date
III..3.1	Morten Pedersen	Update the draft readiness plan including the market potential study and NAMA framework	Jan. 2016
Description			
Final readiness report and this document will also be considered final NAMA proposal . The common product will be called “NAMA cement readiness report”			

No.	Responsible	Product	Date
P-III.3.1	Morten Pedersen	Draft NAMA cement readiness report Final NAMA cement readiness report	29.01.2016

## 6 PAYMENT TERMS

As the products have been developed further and a minor clarity has been needed. The payment terms is described below. The payment is due when the product

Product	Product name	% of contract value
<b>P-0.4.1b</b>	Final Inception Report	20%
<b>P-I.2.6.d</b>	First version of database	20%
<b>P-I.9.1</b>	Baseline and options Study	20%
<b>and</b>		
<b>P-I.9.2</b>	Draft Readiness Plan	
<b>P-II.2.5</b>	Final Financial Plan	20%
<b>P-III.3.1</b>	NAMA cement Readiness Report	20%

## **7 LIST OF APPENDIX**

- 1. NAMA related activities in Vietnam**
- 2. List of horizontal rotary shaft kiln in operation**
- 3. Overview of new cement plants in the period 2011-2022 with vision to 2030.**
- 4. Holding organisation of VICEM**
- 5. Product Plan**
- 6. Minutes of meeting from contract negotiation**
- 7. Budget**
- 8. Programme inception mission**
- 9. Brief introduction**



### Appendix 1: NAMA-related activities in Vietnam

<b>Time</b>	<b>Activity</b>	<b>Implementing agency</b>	<b>International donors</b>
<b><i>NAMA Readiness</i></b>			
July 2012	Mitigation Action Implementation Network (MAIN) Workshop in Halong bay, Vietnam		CCAP
Sep 2012	NAMA/MRV training in Kitakyushu		JICA
Sep 2012	NAMA training in Tokyo		Ministry of Environment of Japan/ OECC
Oct 2012	Training on NAMA Development in Hanoi		GIZ
2012-2013	Vietnam-Japan Capacity-building Cooperation and Joint Study Project for NAMAs in waste sector in a MRV manner	MONRE	Ministry of Environment of Japan/ OECC
Aug 2012- Nov 2012	Technical guideline on: Nationally Appropriate Mitigation Actions (NAMAs) development	MONRE	UNDP
Oct 2012- 2015	Facilitating Implementation and Readiness for Mitigation (FIRM)	MONRE	UNEP/DANIDA
2012-2013	Support for NTP on climate change with a focus on energy and transport	MOIT	NDF/ADB
Nov 2010- June 2013	Strengthening planning capacity for low carbon growth in developing Asia	MPI	ADB
2013	Vietnam Low Carbon Options Assessment: Solid waste sector		The World Bank
2012-2015	Strengthening Capacity on Climate Change Initiatives in the Industry and Trade sectors (CCIT)	MOIT	UNDP
<b><i>NAMA Proposals</i></b>			
2010-2012	NAMAs supported by Fast Start Climate Finance (a total of 150-250 energy-efficiency projects in brick and ceramic and other sectors will be implemented as part of the fast-start finance support)		
2012-2015	Pilot programme for supporting up-scaled mitigation action in Vietnam's cement sector	MOC	Nordic Partnership Initiative/NDF
2013-2020	NAMA in the Waste Sector: Waste to Resources for Cities in Vietnam	MONRE	UN-ESCAP
2012-2014	FIRM project: windpower NAMA	MOIT	UNEP/DANIDA
2012-2014	FIRM project: biogas NAMA	MONRE	UNEP/DANIDA
2013-2017	Biogas Expansion under the Low Carbon Agricultural Support Project (LCASP)	MARD	ADB/NDF

**APPENDIX 2: LIST OF HORIZONTAL ROTARY SHAFT KILN UNDER OPERATION UP TO 2010**

<b>No</b>	<b>Name</b>	<b>Location</b>	<b>Capacity (1000 t/y)</b>
1	Điện Biên	T.P Điện Biên, TP. Điện Biên	350
2	La Hiên 1	H. Võ Nhai, T. Thái Nguyên	250
3	La Hiên 2	H. Võ Nhai, Thái Nguyên	600
4	Quang Sơn	H. Đồng Hỷ, T. Thái Nguyên	1.500
5	Tuyên Quang	T.X Tuyên Quang, T. Tuyên Quang	270
6	Hữu Nghị 1	T.P Việt Trì, T. Phú Thọ	250
7	Hữu Nghị 2	T.P Việt Trì, T. Phú Thọ	350
8	Hữu Nghị 3	T.P Việt Trì, T. Phú Thọ	450
9	Sông Thao	H. Thanh Ba, T. Phú Thọ	910
10	Thanh Ba	H. Thanh Ba, T. Phú Thọ	350
11	Yên Bình	H. Yên Bình, T. Yên Bái	910
12	Yên Bái	H. Yên Bình, T. Yên Bái	350
13	Đồng Bành	H. Chi Lăng, T. Lạng Sơn	910
14	Hoà Bình	H. Lương Sơn, T. Hoà Bình	350
15	Nam Sơn	H. Chương Mỹ, TP. Hà Nội	350
16	Hoàng Thạch 1	H. Kinh Môn, T. Hải Dương	1.100
17	Hoàng Thạch 2	H. Kinh Môn, T. Hải Dương	1.200
18	Hoàng Thạch 3	H. Kinh Môn, T. Hải Dương	1.300
19	Phúc Sơn	H. Kinh Môn, T. Hải Dương	1.800
20	Thành Công 3	H. Kinh Môn, T. Hải Dương	350
21	Phúc Sơn 2	H. Kinh Môn, T. Hải Dương	1.800
22	Phú Tân	H. Kinh Môn, T. Hải Dương	350
23	Hải Phòng	H. Thuỷ Nguyên, TP. Hải Phòng	1.400
24	Chinh phong 1	H. Thuỷ Nguyên, TP. Hải Phòng	1.400
25	Chinh phong 2	H. Thuỷ Nguyên, TP. Hải Phòng	1.400
26	Cẩm Phả	TX. Cẩm Phả, T. Quảng Ninh	2.300
27	Thăng Long	H. Hoành Bồ, T. Quảng Ninh	2.300
28	Lam Thạch 1	TX. Uông Bí, T. Quảng Ninh	450
29	Lam Thạch 2	TX. Uông Bí, T. Quảng Ninh	450
30	Hạ Long	H. Hoành Bồ, T. Quảng Ninh	2.000
31	Bút Sơn	H. Kim Bảng, T. Hà Nam	1.400
32	Bút Sơn II	H. Kim Bảng, T. Hà Nam	1.600
33	Kiến Khê	H. Thanh Liêm, T. Hà Nam	120
34	X 77	H. Kim Bảng, T. Hà Nam	120
35	Hoàng Long	H. Thanh Liêm, T. Hà Nam	350
36	Thanh Liêm	H. Thanh Liêm, T. Hà Nam	450
37	Hoà Phát	H. Thanh Liêm, T. Hà Nam	910
38	Tam Điệp	TX. Tam Điệp, T. Ninh Bình	1.400
39	Vinakansai	H. Gia Viễn, T. Ninh Bình	910

40	Duyên Hà 1	H. Hoa Lư, T. Ninh Bình	600
41	Duyên Hà 2	H. Hoa Lư, T. Ninh Bình	1.800
42	Hướng Dương	TX. Tam Điệp, T. Ninh Bình	910
43	Hướng Dương II	TX. Tam Điệp, T. Ninh Bình	910
44	The VISAI	H. Gia Viễn, T. Ninh Bình	1.800
45	Bim Sơn	TX. Bim Sơn, T. Thanh Hoá	1.850
46	Bim Sơn II	TX. Bim Sơn, T. Thanh Hoá	2.000
47	Công Thanh	H. Tĩnh Gia, T. Thanh Hoá	910
48	Nghi Sơn	H. Tĩnh Gia, T. Thanh Hoá	2.150
49	Nghi Sơn II	H. Tĩnh Gia, T. Thanh Hoá	2.150
50	Hoàng Mai	H. Quỳnh Lưu, T. Nghệ An	1.400
51	Sông Gianh	H. Tuyên Hoá, T. Quảng Bình	1.400
52	áng Sơn	H. Quảng Ninh, T. Quảng Bình	350
53	Luksvasi 1, 2	H.Hương Trà, T. Thừa Thiên Huế	600
54	Luksvasi 3	H.Hương Trà, T. Thừa Thiên Huế	650
55	Luksvasi 4	H.Hương Trà, T. Thừa Thiên Huế	1.200
56	Tây Ninh	H. Tân Châu, T. Tây Ninh	1.500
57	Bình Phước 1	H. Bình Long, T. Bình Phước	2.300
58	Hà Tiên 2	H.Kiên Lương, T. Kiên Giang	1.310
59	Holcim	H.Kiên Lương, T. Kiên Giang	1.760
	<b>TOTAL</b>		<b>62.560</b>

Note:

- Total vertical shaft kilns capacity up to 2010: 3.48Mt
- Total vertical shaft and horizontal rotary kilns capacity up to 2010: 66.04 Mt.

**List of independant cement grinding stations with capacity above 100'000 t/y**

No	Name	Location	Capacity (1000 t/y)
<b>Whole country</b>			<b>6.120</b>
North			<b>200</b>
1	Trạm nghiền Pá Vinh	T. Sơn La	100
2	C/ty CP BT và XD Vinaconex	H. Chương Mỹ - T. Hà Tây	100
MIDDLE			<b>1.790</b>
1	Trạm nghiền Quảng Trị	T. Quảng Trị	250
2	C/ty gạch men COSEVCO	KCN Liên Chiểu-TP. Đà Nẵng	200
3	Trạm nghiền Đà Nẵng VICEM	Thành phố Đà Nẵng	500
4	C/ty XL và VLXD Quảng Ngãi	KCN Tịnh Phong, T. Quảng Ngãi	100
5	Cement Co.: Bình Định	TT. Diêu Trì, T. Bình Định	140
6	C/ty SX VLXD và XD số 1 Cosevco	H. Tuy An - T. Phú Yên	100
7	Trạm nghiền Cam Ranh VICEM	H. Cam Ranh, T. Khánh Hoà	500
SOUTH			<b>4.130</b>
1	C/ty CP tấm lợp Đồng Nai	KCN1 Biên Hoà, T. Đồng Nai	200
2	Cement Co.: Bửu Long	H. Vĩnh Cửu - T. Đồng Nai	200
3	C/ty CP phát triển Sài Gòn	P. Long Bình, Q 9, TP. Hồ Chí Minh	200
4	C/ty VLXD Hạ Long	Q. Thủ Đức, TP. Hồ Chí Minh	130
5	Trạm nghiền Long An	T. Long An	500
6	X/n 406 C/ty XD 621 Quân khu 9	TX. Vị Thanh, T. Hậu Giang	150
7	C/ty VL và SSCT giao thông 720	P. Bình Thủy, TP. Cần Thơ	100

8	Cement joint venture Hà Tiên 2	H. Ô Môn - T. Hậu Giang	500
9	C/ty SX và KD VLXD Cần Thơ	KCN Trà Nóc, TP. Cần Thơ	300
10	C/ty tấm lợp Đất Phương Nam	KCN Trà Nóc, TP. Cần Thơ	100
11	Cement plant: An Giang	TX. Long Xuyên, T. An Giang	300
12	Cement Co.: Hà Tiên Kiên Giang	H. Kiên Lương, T. Kiên Giang	200
13	Cement Co.: Hà Tiên	TT. Kiên Lương, T. Kiên Giang	200
14	Cement Co.: Kiên Giang	TT. Kiên Lương, T. Kiên Giang	150
15	N/máy xi măng Lafarge	T. Đồng Nai	500
16	Cement Co.: DIC Bình Dương	T. Bình Dương	200
17	Cement Co.: Hà Tiên Becamex	T. Bình Dương	200

**List of cement grinding station related to a cement plant with clinker kiln**

	Name	Owners	Location	Capacity (t/y)
	<b>Total</b>			<b>13.500.000</b>
1	Northern terminal for reception, milling and cement distribution	VICEM	KCN Phú Hữu, Quận 9	1.000.000
2	Cement Terminal: Phú Hữu	Cement Co.: Bình Phước	KCN Phú Hữu	1.000.000
3	Cement Terminal: COTEC	Cement Co.: Holcim	KCN Hiệp Phước, Nhà Bè	1.000.000
4	Cement Terminal: Hạ Long	Cement Co.: Hạ Long	- nt -	1.200.000
5	Cement Terminal: Thăng Long	Cement Co.: Thăng Long	- nt -	1.200.000
6	Cement Terminal: Phương Nam	Cement Co.: Tây Ninh	- nt -	500.000
7	Cement Terminal: Chinfon	Cement Co.: Chinfon	- nt -	800.000
8	Cement Terminal: Chinfon 2	Cement Co.: Chinfon	- nt -	800.000
9	Cement Terminal: Cẩm Phả	Cement Co.: Cẩm Phả	KCN Mỹ Xuân – Tân Thành – Bà Rịa Vũng Tàu	1.500.000
10	Công ty cổ phần XM Hà Tiên I	Cement Co.: Hà Tiên	P. Trường Thọ–Q. Thủ Đức	1.500.000
11	Cement Terminal: Phan Rang	Cement Co.: Lukvaxi	TP. Phan Rang - Ninh Thuận	1.000.000
12	Cement Terminal: Công Thanh	Cement Co.: Công Thanh	T. Đồng Nai	1.000.000
13	Cement Terminal: Khánh Hoà	Cement Co.: Công Thanh	T Khánh Hoà	1.000.000

*Source: Master plan for development of cement industry in period 2011-2020 vision to 2030*

**APPENDIX 3: LIST OF NEW CEMENT PROJECT IN PERIOD 2011-2022 VISION TO 2030**

No	Project	Location	Project Investor <sup>(1)</sup>	Capacity (1000 t/y)	Comple- tion	Status
<b>By 2010, there are 59 plants in operation</b>				<b>62.560</b>		
<b>Project to be in operation in 2011 (10 Projects)</b>				<b>9.480 (Accu: 72.040)</b>		
1	Tân Quang	T. Tuyên Quang	Tập đoàn Than khoáng sản VN	910	QI	Under commissioning
2	Quán Triều	H. Đại Từ T. Thái Nguyên	C/ty CP XM Quán Triều	600	Q II	Under commissioning
3	Mai Sơn	H. Mai Sơn T. Sơn La	C/ty CP XM Sơn La	910	QII	Under commissioning
4	áng Sơn 2	H. Quảng Ninh T. Quảng Bình	C/ty TNHH cơ khí đúc Thăng Lợi	450	QII	Under commissioning.
5	Hệ Dưỡng 1 (converted)	H. Hoa Lư T. Ninh Bình	Cement Co.: Hệ Dưỡng	1.800	QII	Under commissioning
6	Thanh Sơn	H. Ngọc Lặc T. Thanh Hoá	Cement Co.: Thanh Sơn	910	QII	Under commissioning
7	Hà Tiên 2 - 2	H. Kiên Lương T. Kiên Giang	C/ty CP XM Hà Tiên 2	1.400	QII	Under commissioning
8	X18 (converted)	H. Yên Thủy T. Hoà Bình	C/ty CP XM X18	350	QIII	Under construction
9	Hệ Dưỡng II	H. Hoa Lư T. Ninh Bình	Cement Co.: Hệ Dưỡng	1.800	QIV	Under construction
10	Hương Sơn (converted)	H. Lạng Giang T. Bắc Giang	Cement Co.: Hương Sơn	350	QIV	Under construction
<b>Project to be in operation in 2012 (7 Projects)</b>				<b>7.810 (Accu: 79.850)</b>		
11	Lạng Sơn (converted)	H. Cao Lộc T. Lạng Sơn	C/ty CP XM Lạng Sơn	350	QI	Vertical shaft kiln conversion
12	Công Thanh 2	H. Tĩnh Gia T. Thanh Hoá	C/ty Cổ phần XM Công Thanh	3.600	QII	Contract signed
13	Ngọc Hà	TX. Hà Giang T. Hà Giang	C/ty CP XM Hà Giang	350	QIII	Under construction
14	Hợp Sơn (converted)	H. Anh Sơn T. Nghệ An	Cement Co.: Hợp Sơn	350	QIV	Contract signed
15	Đồng Lâm	H. Phong Điền T. Thừa Thiên Huế	C/ty CP XM Đồng Lâm	1.800	QIV	Contract signed
16	Trung Sơn	H. Lương Sơn T. Hoà Bình	C/ty CP XD và DL Bình Minh	910	QIV	Contract signed
17	VINAFUJI Lào Cai (converted)	H. Bảo Thắng T. Lào Cai	C/ty CP XM VINAFUJI	450	QIV	Contract signed
<b>Project to be in operation in 2013 (6 projects)</b>				<b>7.660 (Accu: 87.510)</b>		
18	Hà Tiên-Kiên Giang	H. Kiên Lương T. Kiên Giang	C/ty CP lanh ke Hà Tiên	450	QI	Under construction
19	Đô Lương	H. Đô Lương T. Nghệ An	Cement Co.: Đô Lương	910	QII	Contract signed.
20	Quảng Phúc	H. Tuyên Hoá T. Quảng Bình	C/ty TNHH VLXD Việt Nam	1.800	QII	Contract signed.
21	Thăng Long 2	T. Quảng Ninh	C/ty CP XM Thăng Long 2	2.300	QIV	Contract signed.
22	Mỹ Đức	H. Mỹ Đức TP. Hà Nội	Cement Co.: Mỹ Đức	1.600	QIV	Contract signed.
23	Trường Sơn – Rô Li	H. Cam Lộ T. Quảng Trị	C/ty CP XM Roli	600	Q. IV	Under construction

No	Project	Location	Project Investor <sup>(1)</sup>	Capacity (1000 t/y)	Completion	Status
<b>Project to be in operation in 2014 (6 projects)</b>				<b>5.480</b> <b>(Accu: 92.990)</b>		
24	Tân Phú Xuân (converted)	H. Thủy Nguyên TP. Hải Phòng	C/ty CP Tân Phú Xuân	910	Q. I	Under construction
25	12/9 Nghệ An (converted)	H. Anh Sơn T. Nghệ An	C/ty CP XM dầu khí 12/9	600	Q. IV	Contract signed
26	Xuân Thành	H. Thanh Liêm T. Hà Nam	C/ty TNHH ĐT & PT Xuân Thành	910	Q. IV	Under construction
27	Tân Thắng	H. Quỳnh Lưu T. Nghệ An	Cement Co.: Tân Thắng	1.800	Q. IV	New in master plan.
28	Thanh Trường (converted)	H. Quảng Trạch T. Quảng Bình	C/ty CP XM Thanh Trường	350	Q. IV	Vertical shaft conversion, contract signed
29	Cao Dương (converted)	H. Kim Bôi T. Hoà Bình	Vinaconex	910	Q. IV	Vertical shaft conversion.
<b>Project to be in operation in 2015 (7 projects)</b>				<b>6.000</b> <b>(Accu: 98.990)</b>		
30	Minh Tâm	H. Bình Long T. Bình Phước	C/ty CP XM Minh Tâm	1.800	Q. IV	Contract negotiation
31	Sơn Dương	H. Sơn Dương T. Tuyên Quang	C/ty Thái Sơn – Bộ Quốc Phòng	350	Q. IV	Under construction
32	Tây Ninh 2	H. Tân Châu T. Tây Ninh	C/ty CP XM FICO Tây Ninh	1.400	Q. IV	Expansion project
33	Sông Gianh 2	H. Tuyên Hoá T. Quảng Bình	Tổng C/ty XD Miền Trung	1.400	Q. IV	Expansion project
34	Quang Minh	H. Thủy Nguyên TP. Hải Phòng	XN tập thể Thương binh Quang Minh	350	Q. IV	Under construction
35	Cao Bằng (converted)	TX. Cao Bằng T. Cao Bằng	C/ty CP XM Cao Bằng	350	Q. IV	Vertical shaft conversion
36	Tiên Sơn (converted)	T.P Hà Nội	C/ty CP XM Tiên Sơn	350	Q. IV	Vertical shaft conversion
<b>Project to be in operation in 2016 - 2020 (20 project)</b> <i>Production line Hữu Nghị 1,2,3 in Viet Tri will move to Yên Mao, Thanh Thủy</i>				<b>30.530</b> <b>(Accu: Hữu Nghị 1,2,3 =129.520 - 1.050 =128.470)</b>		
37	Hoàng Mai 2	T. Nghệ An	C/ty CP XM Hoàng Mai	4.500	Q. IV	New in master plan
38	Bim Sơn (converted from wet to dry tech.)	T. Thanh Hoá	Tổng C/ty CN XM Việt Nam	2.000 (Capacity added 1.400)		New in master plan
39	Hà Tiên 2 - 1 (converted from wet to dry tech.)	Kiên Giang	Tổng C/ty CN XM Việt Nam	1.400 (Capacity added 1.160)		New in master plan
40	Việt Đức	H. Yên Thế T. Bắc Giang	C/ty CP phát triển CN IDC	910		Under construction
41	Tân Tạo	H. Thanh Liêm T. Hà Nam	C/ty CP đầu tư CN Tân Tạo	910		FS
42	An Phú	H. Bình Long T. Bình Phước	C/ty cổ phần xi măng An Phú	1.800		Under construction
43	Yên Mao	H. Thanh Thủy T. Phú Thọ	C/ty CP Phát triển Hùng Vương	910		New location for Hữu Nghị 1,2,3
44	Phú Sơn	H. Nho Quan T. Ninh Bình	C/ty CP XM Phú Sơn	1.200		Under construction

No	Project	Location	Project Investor <sup>(1)</sup>	Capacity (1000 t/y)	Completion	Status
45	Long Thọ 2 (converted)	H. Hương Trà T. Thừa Thiên Huế	Tổng công ty Xây dựng Sông Hồng	1.400		Under construction
46	Nam Đông	H. Nam Đông T. Thừa Thiên Huế	C/ty CP đầu tư XM Nam Đông Việt Song Long	1.800		Under construction
47	Trường Thịnh	H. Tuyên Hoá T. Quảng Bình	C/ty TNHH XD Trường Thịnh	1.800		Under construction
48	Thanh Mỹ	H. Nam Giang T. Quảng Nam	Tập đoàn Xuân Thành	1.400		FS
49	Bình Phước 2	T. Bình Phước	C/ty CP XM Hà Tiên	4.500		FS
50	Bắc Kạn	H. Chợ Mới T. Bắc Kạn	Công ty CP Khoáng sản Bắc Kạn	910		FS
51	Sài Gòn Tân Kỳ	H. Tân Kỳ T. Nghệ An	Tập đoàn đầu tư Sài Gòn	910		FS
52	Hạ Long 2	H. Hoành Bồ T. Quảng Ninh	Tổng C/ty Sông Đà	2.000		Expansion project
53	Liên Khê	H. Thủy Nguyên TP. Hải Phòng	Cement Co.: Bạch Đằng	1.200		FS
54	CAVICO-FI	H. Thanh Liêm T. Hà Nam	Công ty TNHH cơ khí Đức Thắng lợi	910		FS
55	Visaihanam	H. Thanh Liêm T. Hà Nam		910		FS
<b>Project to be in operation in 2021 - 2030 (6 projects)</b>				<b>9.040</b> <b>(Accu:138.420)</b>		
56	Tân Lâm	T. Quảng Trị	Cement Co.: Tân Lâm	1.200 – (2.000)		New in master plan
57	Tràng An	H. Thanh Liêm T. Hà Nam	C/ty CP XM Tràng An	910		FS
58	Ngân Sơn	H. Yên Thế T. Bắc Giang	C/ty cổ phần Trường Sơn	910		FS
59	Holcim 2	H. Kiên Lương T. Kiên Giang	C/ty liên doanh Holcim VN	3.600		Expansion project
60	Yên Bình 2	H. Yên Bình T. Yên Bái	Vinaconex	910		New in master plan
61	Hoà Phát 2	H. Thanh Liêm T. Hà Nam	Cement Co.: Hoà Phát	1.800		Expansion project
62	Hoàng Sơn	H. Nông Công T. Thanh Hoá	Cement Co.: Hoàng Sơn	910		New in master plan

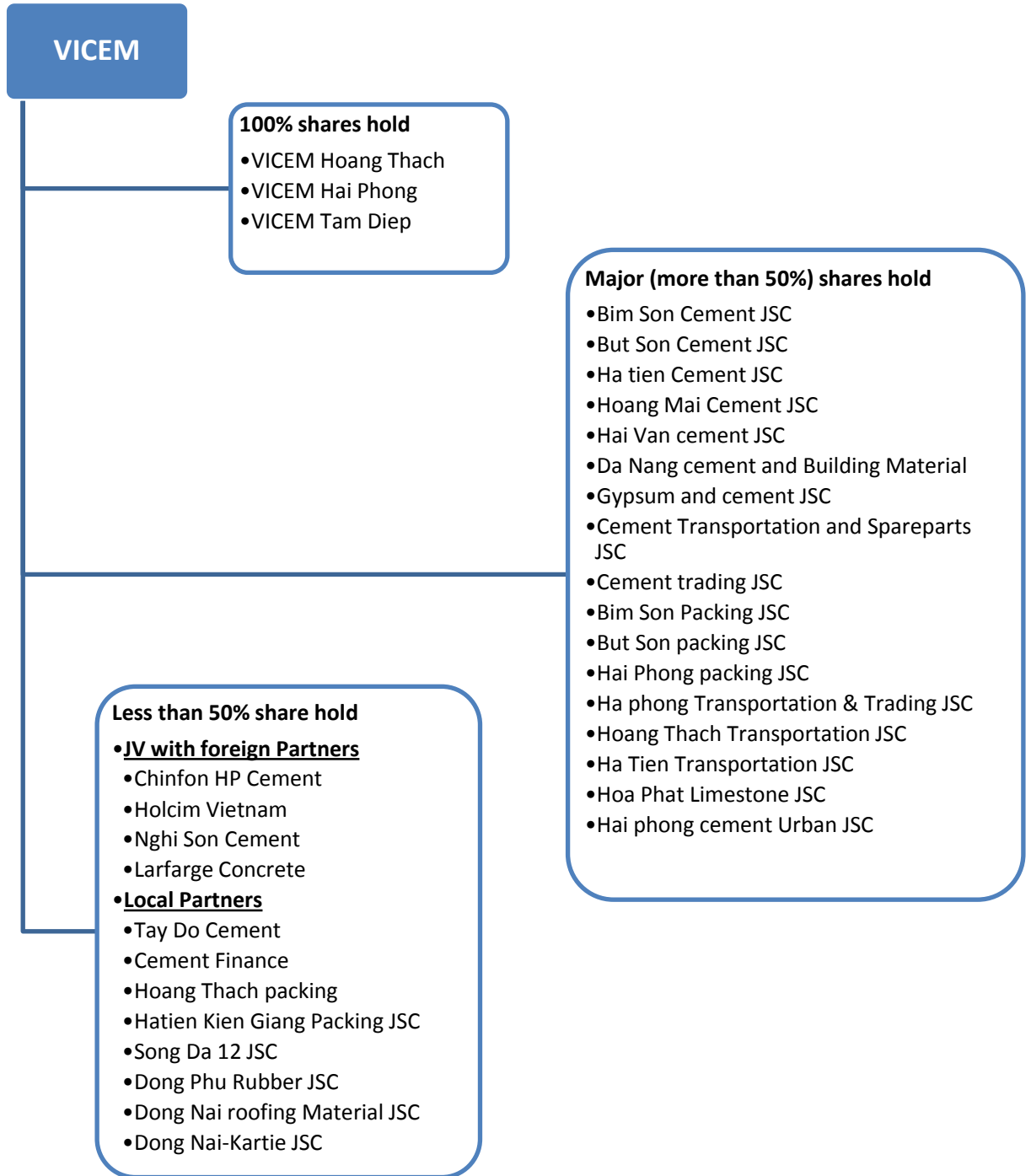
Remarks:

(1) Project Investor are planned, can be changed when approved

(2) Vertical shaft kiln conversion project

**Source: Master plan for development of cement industry in period 2011-2020 vision to 2030**

## APPENDIX 4: HOLDING ORGANISATION OF VICEM



*Source: VICEM*









		boundary, main calculation indicators and matrices to be applied																	
	P-I.2.6b	Compare the three international options with the Vietnamese reality and make a recommendation																	
	P-I.2.6c	Prepare a template for GHG database																	
	P-I.2.6d	First version of database																	
	P-I.3.1	Trends of emissions							■										
	P-I.3.2	Baseline projection study								■									
	P-I.3.3a	Different reference levels									■								
	P-I.3.3b	Comparison study									■								
I.3	P-I.3.4	Report recommendation to procedures and international requirements for management and revision of baseline database									■								















GRANT No.C34

NORDIC PARTNERSHIP INITIATIVE PILOT PROGRAMME FOR SUPPORTING UP-SCALED CLIMATE CHANGE MITIGATION ACTION IN VIETNAM'S CEMENT SECTOR

MINUTES OF MEETING

Subject: Contract Negotiation

Date: 1-2 December 2013

Venue: Department of Science , Technology and Environment, Ministry of Construction  
37 Le Dai Hanh, Hanoi

Participants:

1. Mr. Nguyen Trung Hoa, Director General of Department of Science, Technology and Environment, MOC
2. Ms. Luu Linh Huong, Expert of Department of Science ,Technology and Environment, MOC
3. Morten Pedersen, Project Team Leader, NIRAS A/S.
4. Mr. Nguyen Tuan Anh, Managing Director, RCEE – NIRAS
5. Ms. Phan Minh Thao, Project Director, RCEE – NIRAS
6. Ms. Do Nguyet Anh,Expert of International Cooperation Department, MOC

Summary of the discussion:

- It has been agreed only to reflect the main issues discussed during the contract negotiation and which need to be explained to have more clarity.
- Morten Pedersen has handed out authorization of 2 December 2013 to negotiate and co-sign the contract.
- Morten Pedersen has also handed out letter of 30 November 2013 confirming the availability of all the key-Experts. It was agreed that no further documentation is needed.
- It was agreed to establish 5 payments and all based on deliveries approved by MOC.

Months after starting the contract	Number of delivery	Name of delivery	Percentage of contract value to be paid
2	O.4.2	Final Inception Report	20%
7	I.2.6	Setting up of a data collection and database system (including first version of database)	20%
12	I.9.1	Preparing a Baseline and Options Study	20%

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	I.9.2	Preparing a Preliminary Readiness Plan	
17	II.2.5	Final financial plan for NAMA programme in cooperation with the relevant Ministries	20%
25	O.6.2	Final Completion Report	20%

- It was agreed that Client will do it utmost to pay the installments within 30 days, but the Client will still have the right to pay with a 60 days without financial consequences.

- The possibility of advanced payment will be kept. The consortium will decide during the project development whether it is needed to activate the advanced payment.

- The consultancy fee for Ms Dang Thi Hong Hanh will be reduced and this amount will be distributed to other activities which need to have a higher allocation of financial resources for instance: seminars /workshops in Vietnam both reimbursables and consultancy services, higher budget for local travel and finally an allocation of funds for data acquisition and processing. The contract value will not be changed and the detailed reallocation of these funds will be done in detail during the inception phase and it will be integrated in the inception report.

- The consortium will have 1 month to mobilize the team after signing the contract.

- All local identifiable indirect taxes (itemized and finalized at Contract negotiations) are reimbursed to the Consortium or are paid by the Client on behalf of the Consortium and the expected values are indicated in below table.

Total Indirect Local Tax	
10% VAT on local firm	EUR 24,061.40 Twenty four thousand sixty one Euros and forty cent.

- The Client and consortium are fully aware that there is a need to attract supplementary funds to secure a fully implemented NAMA in the cement sector in Vietnam. Five topics have already been identified and indicated in the table below. The ideas will be described further in the inception phase and the five proposals for such five ideas will be described in detail at 5 specific milestones as in below table .

No.	Activities	Time and deliveries where project idea should be described.
1.	Study tour for the cement plants	2 <sup>nd</sup> project month/ Deliverable O.4.2: Final Inception Report
2.	Further support to integrate the project and experience in the international climate negotiations and cement networks/initiatives	2 <sup>nd</sup> project month/ Deliverable O.4. 2: Final Inception Report



3.	Energy audits based on concrete measurements (measuring equipment should either be purchased or rented)	12 <sup>th</sup> project month/ Deliverable I.4.4: Establishment of an MRV system for regular measurement, reporting and verification of the relevant emissions.
4.	Support to prepare feasibility studies for investment project at specific cement plants	17 <sup>th</sup> project month/ Deliverable II.2.5: Final financial plan for NAMA programme in cooperation with the relevant Ministries
5.	Support to the full-scale implementation of the NAMA	17 <sup>th</sup> project month/ Deliverable II.2.5: Final financial plan for NAMA programme in cooperation with the relevant Ministries

MOC and Consortium are aware that all in this minutes of meeting is subject to "No Objection" from NDF.

Date: 3 December 2013

Date: 3 December 2013

Signature:

Signature:

Name: Nguyen Trung Hoa  
Title: Director General  
Department of Science,  
Technology and Environment  
Ministry of Construction

Name: Morten Pedersen  
Title: Project Team Leader  
NIRAS A/S

## APPENDIX 7 – Budget

### SUMMARY OF COSTS

<b>Item</b>	<b>Cost</b>
Remuneration	1,090,089.00 EURO
Reimbursables	275,642.00 EURO
<i>Subtotal</i>	<i>1,365,731.00 (EURO)</i>
Local indirect Taxes	24,061.00 (EURO)
<b>TOTAL</b>	<b>1,389,792.40 (EURO)</b>

## FORM FIN-4 BREAKDOWN OF REIMBURSEABLE EXPENSES

<b>B. EXPENSES</b>					
<b>No.</b>	<b>Type of Expenses</b>	<b>Unit</b>	<b>Unit Cost</b>	<b>Quantity</b>	<b>Total cost, EUR</b>
1	<u>Per diem (International)</u>	Day	150	390	58.500
2	<u>Per diem (National)</u>	Day	50	100	5.000
3	International flights (Vietnam, COPs, regional, Nordic capital)	Ticket	2.400	24	57.600
4	Domestic flights	Ticket	200	30	6000
5	Miscellaneous travel expenses	Trip	200	24	4.800
6	Land transport and vehicle hire	Trip	100	50	5.000
7	Communication	Month	300	24	7.200
8	Report preparation, production, translation	Copy	1.000	20	20.000
9	Seminars and meetings <sup>(*)</sup>	Unit	3.500	7	24.500
10	Studies, survey and reports				-
10a	Additional survey	Lump sum	15.000	1	15.000
10b	Awareness campaign <sup>(#)</sup>	Lump sum	14.842	1	14.842
10c	Other key experts if needed, has to be agreed with MOC in advance and also missions by Vietnamese authorities to Europe	Lump sum	50.000	1	50.000
11	Office operation	Month	300	24	7.200
<b>Total costs</b>					<b>275.642</b>

<sup>(\*)</sup> International Advisory Group meetings will not be covered by the project budget

<sup>(#)</sup> Reallocate EUR 3500 from budget item 9

**FORM FIN-3 BREAKDOWN OF REMUNERATION**

<b>No.</b>	<b>Name</b>	<b>Position</b>		<b>Time input in person/month</b>
<b>Key experts</b>				
<u>IE 1</u>	<u>Morten Pedersen</u>	<u>Team leader and Senior Carbon Specialist</u>	Home	3,75
			Field	8,25
<u>IE 2</u>	<u>Bruno Vanderborght</u>	<u>Cement Sector Specialist</u>	Home	7,50
			Field	0,50
<u>IE 3</u>	<u>Justine Sefton</u>	<u>Senior Legal and Regulatory Expert</u>	Home	2,25
			Field	0,50
<u>IE 4</u>	<u>Ingo Puhl</u>	<u>Senior Climate Finance Expert</u>	Home	6,00
			Field	0,50
<u>IE 7</u>	<u>Axel Michaelowa</u>	<u>Designated MRV Expert</u>	Home	5,00
			Field	0,50
<b>Other experts</b>				
<u>NE 1</u>	<u>Ha Dang Son</u>	<u>Deputy Team Leader and Mitigation Specialist</u>	Home	0,00
			Field	24,00
<u>NE 2</u>	<u>Nguyen Tuan Anh</u>	<u>Cement Sector Specialist</u>	Home	0,00
			Field	12,00
<u>NE 8</u>	<u>Nguyen Tien Dinh</u>	<u>Institutional Strengthening Specialist</u>	Home	0,00
			Field	12,00
<u>NE 10</u>	<u>Danh Hanh</u>	<u>MRV Expert</u>	Home	0,00
			Field	12,00
<u>INKE</u>	<u>Rune Jørgensen</u>	<u>Management Support</u>	Home	17.600
			Field	17.600
<u>IE 5</u>	<u>Manuel Cocco</u>	<u>Public Participation and Awareness Expert</u>	Home	15.400
			Field	15.400
<u>IE 6</u>	<u>Stefan Wehner</u>	<u>Modelling expert</u>	Home	18.700

			Field	18.700
<u>NE 3</u>	<u>Nguyen Hung Quang</u>	<u>Legal Regulation Expert</u>	Home	1.848
			Field	1.848
<u>NE 4</u>	<u>Dang Hanh</u>	<u>Climate Finance Expert</u>	Home	2.618
			Field	2.618
<u>NE 5</u>	<u>Nguyen Hong Loan</u>	<u>Public Awareness Campaign Expert</u>	Home	1.056
			Field	1.056
<u>NE 6</u>	<u>Tien Hai</u>	<u>Modelling Expert</u>	Home	1.056
			Field	1.056
<u>NE 7</u>	<u>Tran Minh Tuyen</u>	<u>Database Manager</u>	Home	2.618
			Field	2.618
<u>NE 9</u>	<u>Lê Anh Tùng</u>	<u>Office manager and Logistics Specialist</u>	Home	1.056
			Field	1.056



# Agenda- NAMA Cement Inception Mission

(24 March – 04 April 2014)

Day	Time	Activity & Tenor	Participants	Venue
<b>Monday 24 March 2014</b>	8.00-12.00	Team internal meeting	MOP, HDS, NTA, THN, DTHH	Project Office, MOC Building 37 Le Dai Hanh, HN
	13.00- 13.30	Courtesy Meeting with MOC	Dr. Nguyen Trung Hoa, DG of DSTE Ms. Luu Linh Huong, Expert in charge, DSTE	Room 129, MOC Building 37 Le Dai Hanh, HN
	14:00- 16.00	Meeting with MOC on management arrangement and data collection	MOP, HDS, NTA, THN Ms. Luu Linh Huong, Expert in charge, DSTE	Project Office MOC, 37 Le Dai Hanh, HN
<b>Tuesday 25 March 2014</b>	10.30-11.30	Meeting with MONRE: - Introduction of NAMA Cement Project -Implementation status of activities that relate to NAMA -Policies that relate to NAMA & GHG emission control	Mr. Nguyen Khac Hieu, DDG of DMHCC Mr. Luong Quang Huy, Expert of DMHCC  MOP, HDS, NTA, THN, DTHH, accompanied by Ms. Huong of MOC	Room 606, MONRE Building 10 Ton That Thuyet, HN
	13.30-14.30	Meeting with MOF: - Introduction of NAMA Cement Project -Financial policies to reduce GHG emissions & support business to access to finance for low-carbon investments	Mr. Tran Anh Tuan, Expert, Tax Policy Dept. Mr. Quy and Mr. Son, Experts, Public Assets Management Dept.  MOP, HDS, THN, DTHH, accompanied by Ms. Huong of MOC	Room 527, MOF Building 28 Tran Hung Dao, HN
	15.00-16.00	Meeting with MPI: - Introduction of NAMA Cement Project -Policies & activities related to NAMA & Green Growth strategy	Mr. Nguyen Tuan Anh, DDG of DSENRE  MOP, HDS, NTA, THN, DTHH, accompanied by Ms. Huong of MOC	VGGS project office 16 Ngo Tat To, HN
	16.30- 17.30	Meeting with MOIT: - Introduction of NAMA Cement Project - Energy policies & emission from energy industry management that relate to cement industry - Matters related to MRV in emission from energy industry management - Exchange with LECB project	Mr. Hoang Van Tam, Manager of Climate Change Division, ISEA  MOP, HDS, NTA, THN, DTHH, accompanied by Ms. Huong of MOC	Room 102, MOIT Building 25 Ngo Quyen, HN
	<b>Wed 26</b>	9.00-10.00	Meeting with VICEM:	Mr. Cai Hong Thu, Deputy General Director,

## APPENDIX 8 – Programme inception mission

<b>March 2014</b>		- Introduction of NAMA Cement Project -Inf. about projects, production & business -Difficulties & challenges in production, business & investment -Recommendations for low carbon development in Vietnam cement	VICEM Mr. Pham Dinh Hoe and Mr. Do Hoang Linh, Technical Dept., VICEM  MOP, HDS, NTA, THN, DTHH	Office, 228 Le Duan, HN
	10.30- 11.30	Meeting with VNCA: - Introduction of NAMA Cement Project -Inf. about Vietnam cement companies -Difficulties & challenges in the point of view of the association -Recommendations for low carbon development in Vietnam cement industry	Mr. Nguyen Hoan Cau - General Secretary of VNCA  MOP, HDS, NTA, THN, DTHH	VNCA office, 2nd floor, 37 Le Dai Hanh, HN
	13.00-14.00	Meeting with VABM; -- Introduction of NAMA Cement Project -Inf. about Vietnam cement companies -Difficulties & challenges in the point of view of the association -Recommendations for low carbon development in Vietnam cement industry	Mr. Thai Duy Sam, General Secretary of VABM  MOP, HDS, DTHH	VABM office, 2nd floor, 235 Nguyen Trai, HN
	14.30-15.30	Meeting with Polysius Vietnam: - Introduction of NAMA Cement Project -Information about turnkey contracts by Polysius -Difficulties & challenges in the point of view of a solution provider -Recommendations for low carbon development in Vietnam cement industry	Mr. Stephan Pruetzmann, General Director, Polysius Vietnam Ltd., Mr. Hiep, Deputy GD, Polysius Vietnam Ltd.,  MOP, HDS, DTHH, THN	Rm.201, Sun City Bld, 13 Hai Ba Trung, HN
<b>Thursday 27 March 2014</b>	8.30- 9.30	Meeting with World Bank: - Introduction of NAMA Cement Project -Related activities/ projects of donors in Vietnam	Ms. Laura Altinger  MOP, HDS, NTA, THN	World Bank office 7 <sup>th</sup> fl., 63 Ly Thai To, HN
	10.00-11.00	Meeting with ADB: - Introduction of NAMA Cement Project -Related activities/ projects of donors in Vietnam	Ms. Lauren Sorkin  MOP, NTA, DTHH, THN	7 <sup>th</sup> fl., Sun Red River Bld, 23 Phan Chu Trinh, HN
	14:00-15:00	Meeting with UNDP: - Introduction of NAMA Cement Project -Related activities/ projects of donors in Vietnam	Ms. Sarwat Chowdhury  MOP, HDS, THN, DTHH	UN One Resident Office 72 Ly Thuong Kiet, HN
	10:00	Meeting with Holcim: cancelled as person in charge	MOP, HDS, NTA	

## APPENDIX 8 – Programme inception mission

<b>Friday 28 March 2014</b>		was on an urgent business trip		
	13.00-14.30	Meeting with Ha Tien Cement Corporation: - Introduction of NAMA Cement Project -Inf. about projects, production & business -Difficulties & challenges from the point of view of a cement producer -Recommendations for low carbon development in Vietnam cement industry	Mr. Hoang Kim Cuong, Deputy General Director, Ha Tien Cement Mr. Phan Thanh An, Manager of ISO - Safety - Environment Division, Ha Tien Cement MOP, HDS, NTA	Ha Tien Cement Office 360 Ben Chuong Duong, Dist.1, HCMC
<b>Monday 31 March 2014</b>	8.30-9.30	Debriefing meeting with MOC	Ms. Luu Linh Huong, Expert, DSTE/MOC MOP, HDS, NTA, DTHH, THN, RUJ	MOC Building, 37 Le Dai Hanh
	13.30-14.30	Meeting with Tan Thang Cement: - Introduction of NAMA Cement Project -Inf. about projects, production & business -Difficulties & challenges in the point of view of a project owner -Recommendations for low carbon development in Vietnam cement industry	Mr. Hoang Tien Dung and Ms. Phan Thi Xuan Dung, Deputy Managers of Project Department, Tan Thang Cement Mr. Nguyen Bien Gioi, Deputy Manager of Technical Department, Tan Thang Cement MOP, HDS, THN, DTHH, RUJ	Tan Thang Cement Office 9 Dao Duy Anh, HN
<b>Tuesday 1 April 2014</b>	9.00 – 11.30	Inception meeting with NDF and MOC. Presentation and agreement on main content Inception Report	MOC: Project Management Board - led by Dr. Nguyen Trung Hoa For NDF: Martina Jagerhorn MOP, HDS, NTA, DTHH, THN, RUJ, NHTL	Main Meeting Theater, 2nd floor, MOC Building, 37 Le Dai Hanh
<b>Friday 4 April 2014</b>	8.00-10.00	Presentation of draft final inception report	MOP, THN, HDS, NTA, RUJ, DTHH, NHL	MOC Building, 37 Le Dai Hanh

Expert	Code
Ha Dang Son	HDS
Nguyen Tuan Anh	NTA
Tran Hong Nhung	THN
Morten Pedersen	MOP
Rune Jørgensen	RUJ
Nguyen Hong Loan	NHL
Dang Thi Hong Hanh	DTHH

**APPENDIX 8 – Programme inception mission**

<b>Institution</b>	<b>Code</b>
Ministry of Construction	MOC
- Department of Science Technology and Environment	DSTE
Ministry of Planning and Investment	MPI
- Department of Science, Education, Natural Resources and Environment	DSENRE
Ministry of Finance	MOF
- Tax Policy Department	
- Public Assets Management Department	
Ministry of Industry and Trade	MOIT
- Industrial Safety Techniques and Environment Agency	ISEA
Ministry of Natural Resources and Environment	MONRE
- Department of Meteorology, Hydrology and Climate Change	DMHCC
Vietnam Cement Industry Corporation	VICEM
Vietnam National Cement Association	VNCA
Vietnam Building Material Association	VABM



# NORDIC PARTNERSHIP INITIATIVE PILOT PROGRAMME FOR SUPPORTING UP- SCALED CLIMATE CHANGE MITIGATION ACTION IN VIETNAM'S CEMENT SECTOR



## A BRIEF INTRODUCTION

### 1. Overview

According to the Bali Action Plan and its agreed outcome in the Conference of Parties to the United Nations Framework Convention on Climate Change (COP), developing countries should consider the implementation of Nationally Appropriate Mitigation Actions (NAMAs) in the context of sustainable development, supported and enabled by technology, financing and capacity building, in a measurable, reportable and verifiable (MRV) manner.

The Cancun Agreements in 2010 reinforced the notion, stating that NAMAs should aim to achieve a deviation from business-as-usual (BAU) emissions in 2020, and NAMAs seeking international support shall be recorded in a registry and subject to international MRV. In Durban conference in 2011, relevant decisions were also made on issues. At the COP 19 in Warsaw limited progress has been observed related to NAMA and the focus is to have a treaty in place at the COP 21 in Paris in 2015 and realistic NAMA will only be a formal part of a climate agreement afterwards.

In 2010, the Nordic Group on Climate Change (NOAK) and the Nordic Environment Finance Corporation (NEFCO) launched the NOAK-NEFCO Partnership Initiative to explore and demonstrate how international climate finance can be matched with up-scaled mitigation plans in developing countries.

In a bottom-up approach, the Initiative seeks to establish concrete Pilot Programmes to illustrate how developing countries can prepare and propose NAMAs in a particular economic segment, how these actions could be supported and enabled by technology, financing and capacity building, and how action could be measured, structured and matched with international climate finance as well as with existing and possible new market mechanisms. These Pilot Programmes also aim to conceptualise, test and learn how a future international climate regime, including possible new market-based mechanisms, could be designed to support up-scaled NAMAs in developing countries.

During 2011 negotiations were initiated to broaden the institutional basis of the Partnership Initiative with the Nordic Development Fund (NDF). As a result, the Initiative was renamed "Nordic Partnership Initiative", and the Nordic stakeholders of the Nordic Partnership Initiative now include NDF, NOAK, and NEFCO.



An agreement has been established between NDF and Ministry of Construction (MOC) on the implementation of the **“Nordic Partnership Initiative Pilot Programme for supporting up-scaled climate change mitigation action in Vietnam’s cement sector”**.

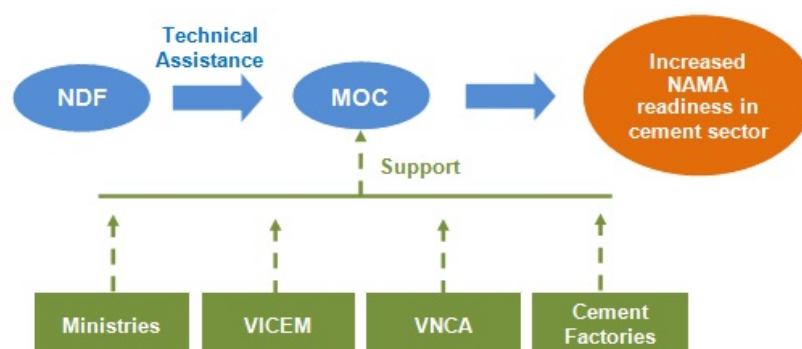
In January 2014 a contract has been signed between MOC and the Consortium after an international tender procedure.

## 2. Objectives

The overall objective of the Pilot Programme is to strengthen Vietnam’s ability to prepare, propose and implement a full-scale scheme of clearly specified NAMAs in the cement sector which could attract international climate finance through the carbon market and other support mechanisms, and through that, support up-scaled mitigation action.

## 3. Methodology and Key Activities

It is proposed that Technical Assistance is provided to develop the readiness to benefit from international climate finance and/or the carbon market for supporting up-scaled mitigation action in the cement sector through the Ministry of Construction (MOC).



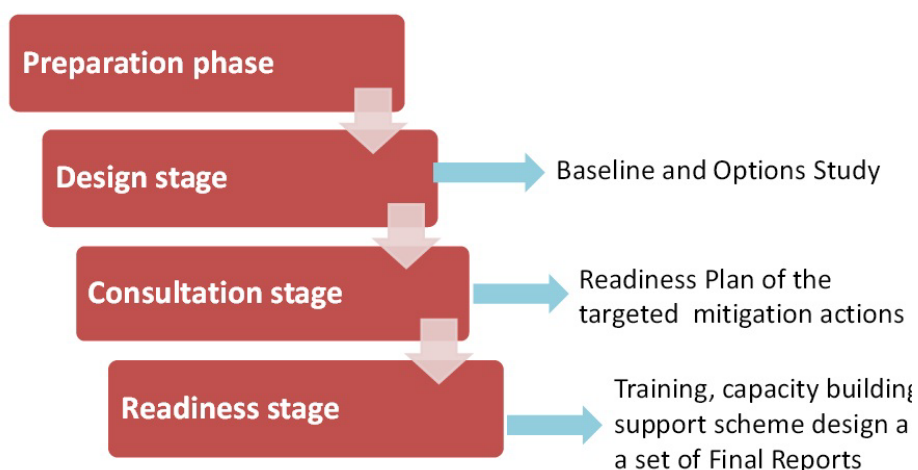
The project implementation involves participation from key Ministries such as Ministry of Investment and Planning (MPI), Ministry of Natural Resources and Environment (MONRE), Ministry of Industry and Trade (MOIT), Ministry of Science and Technology (MOST), and cement factories, Vietnam Cement Industry Corporation (VICEM), Vietnam National Cement Association (VNCA) and other relevant entities.

These readiness activities shall address gaps in data availability and quality and technical and institutional capacity, as well as relevant technical, financial and other barriers to up-scaled mitigation and private sector engagement.

Main activities include:

- Collection of up-to-date data on emission reduction potential;
- Capacity to develop baseline emission projections;
- Capacity to estimate (emission reduction) impact of mitigation actions;
- MRV system of international standard;
- Identification of barriers to mitigation action, and proposals for addressing them;
- Identification of appropriate support instruments for mitigation action, including identification of potential sources of financing for support, mechanism for funding, criteria for support, and MRV needs; and
- Relevant institutional arrangements, capacity building and training for all of the above.

The Pilot Programme shall consist of one preparation phase and three stages:



Although there is a separate Consultation Stage, an on-going dialogue and close cooperation is expected to be established with key stakeholders from start to finish. A host country –driven approach, including strong local presence and close and genuine collaboration with authorities in Vietnam and other local stakeholders, is pivotal to the success of the Pilot Programme.

#### 4. Implementation Arrangements

MOC has obtained government approval for implementation of the Pilot Programme in consultation with MPI, MOF, MONRE, MOIT, and MOST. Within the Ministry of Construction, Department of Science Technology and Environment will be the focal point.

MOC will establish a National Steering Committee for the Pilot Programme comprising representatives and key constituents from MPI, MOF, MONRE, MOIT, and MOST. The committee's primary role will be to provide technical inputs for the Pilot Programme, and generate broad acceptance of the programme approach and methodologies, and of the draft and final documents.

The Pilot Programme will also take guidance from an International Advisory Group, with representatives from the Vietnamese government, NDF, the Nordic working group for global climate negotiations (NOAK), and NEFCO. The Advisory Group will be chaired by NDF. The objective of the Advisory Group work is to ensure sufficient exchange of views between all the key stakeholders during the implementation of the Pilot Programme.

The Pilot Programme will be implemented in line with related on-going and planned work contributing to the Government's Green Development Strategy such as NDF-ADB's Support for the National Target Program with a Focus on Energy and Transport; ADB's Strengthening Planning Capacity Low-Carbon Growth in Developing Asia; and the World Bank's Vietnam Low Carbon Options Assessment. Efforts will be made during the implementation period to involve other actors that are supporting mitigation to climate change in Vietnam (e.g. IFC, Danish International Development Assistance, Swiss Development Cooperation, European Union, JICA, UNDP, UNIDO and UNEP). Vietnam recently joined the Partnership for Market Readiness (PMR) of the World Bank. Efforts will be made to coordinate the efforts in the Pilot Programme with the PMR activities.

#### 5. Other information

- Financing: €1.42 million from Nordic, €0.1 million from Viet Nam (in-kind)
- Duration: February 2014 to February 2016