

This project is relative to national tasks and strategies to respond to climate change in the energy sector. This is new development orientation which contributes to sustainable development of the Vietnam's electricity.

– Project deliverables:

Contribute to quantify and quantity energy saving, environmental protection and GHG mitigation benefits from the energy sector through cogeneration technology.

Contribute to implement the general objective of the UNFCCC and NAMA.

– Project scope and possible implementation:

This is a consultation project.

This project has a feasibility due to its commercialization and utilization.

This project is relative to the oil filter, petrochemical; building material, cement and paper productions; hotel complex projects which have energy demand, etc. of Dung Quat economic zone.

– Time lines: 18 months.

– Budget/Resource requirements:

Expected budget: 250,000 USD.

– Measurement/Evaluation:

Quantify and quantity economic and financial benefits due to energy saving and GHG mitigation.

– Possible Complications/Challenges:

General awareness on cogeneration technology and its benefits is still limited.

– Responsibilities and coordination:

Coordination agency: DMHCC

Cooperation agencies: INDUTEC and Center for Ozone Layer Protection

3. Project 3

a) Name of proposed project

“International cooperation: Development of the bio energy in the live stock sector to replace energy used in agriculture zone and mitigate GHG emission”.

b) Information of the proposed project:

– Introduction/Background:

The increasing development of animal husbandry of Vietnam leads to animal wastes are not treated and environmental pollution. The use of straw, firewood and coal for cooking is one of GHG emission source.

To build biogas cellar on animal husbandry region is not only contribute to waste treatment but also environmental cleaning and reduce firewood for cooking and woman worker in agriculture region.

– Purpose and objectives:

Improve farmer life, save burning material and reduce environmental pollution.

Create methane for cooking in agriculture region to mitigate GHG emission.

– Relationship to the country's sustainable development priorities:

Project is suitable with development orientation of agriculture which mentioned in it's development strategy and contributes to mitigate GHG emission, reduce environmental pollution, eliminate hunger, reduce poverty and improve farmer's life.

– Project deliverables:

Project will encourage the use of renewable energy in agriculture region and help decision makers to have suitable plans in exploiting and developing renewable energy in agriculture region and facilitate the application of renewable energy and protection of environment in Vietnam.

– Project scope and possible implementation:

Project is proposed to implement nationally. It will bring practical benefits to farmers and contribute to hunger elimination and poverty reduction.

According to the assessment of experts, this project has high feasibility due to it's benefits and not to request high technologies.

– Time lines: expected in 7 years.

– Budget/Resource requirements:

Expected budget: 8 million USD.

– Measurement/Evaluation:

Tangible results: The biogas cellars will be 280 thousand and 560 thousand in 2020 and 2030, respectively.

Besides, biogas residues will be used as additional food for pigs, fish, plants, etc.

– Possible Complications/Challenges:

Lack of fuel for methane sinks

- Responsibilities and Coordination:
Farmers Association, Agriculture Expansion, Experts, Farmers,

4. Project 4:

a) Name of proposed project

Management of the irrigation to mitigate methane emission and improve water irrigation efficiency in Red and Cuu Long river deltas.

b) Information of the proposed project:

- Introduction/Background:
National strategy on improving irrigation system to 2020 has been developed. Project contributes to implement general objectives of this strategy. Water resources protection is one of important policy of the country.

- Purpose and objectives:
Saving water irrigation, improving rice productivity and production and farmer's life and mitigate methane emission.

- Reducing methane emission on rice field

- Building perfect irrigation process to improve rice productivity

- Capacity building for technical officials to implement suitable irrigation process

- Relationship to the country's sustainable development priorities:
Project is suitable with development orientation of agriculture which mentioned in it's development strategy and contributes to mitigate GHG emission, reduce environmental pollution, eliminate hunger, reduce poverty and improve farmer's life.

- Project deliverables:
It's objective is to reduce methane emission through suitable management of irrigation which is drained at 2 stages, tillering and ripening and save water irrigation and improve rice productivity. Amount of the CH₄ reduction by this technology can be estimated as follows:

- Amount of CH₄ reduction: 75kg CH₄/ha/season

- Up to 2020: 75kg CH₄ * 3,000,000 ha = 225 Gg CH₄ ≈ 4,725 Gg CO₂ equivalent.

- Up to 2030: 75kg CH₄ * 5,000,000 ha = 375 Gg CH₄ ≈ 7,875 Gg CO₂ equivalent.

- If 1 million ha of rice field are applied this technology, 75 Gg CH₄ will be reduce per year ≈ 1,575 Gg CO₂ equivalent/year.

- Project scope and possible implementation:
Project is proposed to implement nationally. It will bring practical benefits to farmers and contribute to hunger elimination and poverty reduction.

- According to the assessment of experts, this project has high feasibility due to it's benefits and not to request high technologies.

- Time lines: expected in 6 years.

- Budget/Resource requirements:.

- Expected budget: 15 million USD.

- Measurement/Evaluation:

- Tangible results: The rice area which is irrigated follow this technology is estimated 3 million ha and 5.4 million ha in 2020 and 2030, respectively. The increasing productivity is about 3-5%. The methane reduction is about 50-100 kg/crop.

- Possible complications/Challenges:

- Irrigation system has not built completely.

- Farmers are still afraid of implementing these technologies because they are worried about the reduction of rice productivity.

- Responsibilities and coordination: Irrigation Associations, Local Irrigation Companies.

5. Project 5:

a) Name of proposed project

"Afforestation on sandy land at coastal zone of South Central".

b) Information of the proposed project:

- Introduction/Background:

- Afforestation on sandy land to combat desertification is implemented at coastal zone of South Central where are high desertification risk.