Viet Nam: Project Results Report

VIET NAM
SCALING UP BIOMASS WASTE-TO-ENERGY IN VIET NAM

CONTEXT

Viet Nam’s GHG inventory (2010) reveals a 602% increase since 1990, with emissions per unit of GDP surpassing all other Asia-Pacific developing countries except China. This is fueled by domestic coal consumption which has increased by 21% between 2013 and 2014 alone. Coal currently accounts for 36% of total electricity supply and is projected to increase to 56% by 2030. Over 98% of the population is connected to the grid and demand will increase by a further 10% a year until 2030 with renewable energy accounting for only 6% of total national energy production.

The Government of Viet Nam’s (GoV) Green Growth Action Plan (GGAP) developed with the support of GGGI seeks to develop new non-renewable energy sources with a focus on biomass energy development. The GoV has adopted a Renewable Energy Development Strategy and Revised National Power Development Master Plan 7 which respectively set biomass energy targets at around 6% and 2% of the national energy mix by 2030.

OVERVIEW

<table>
<thead>
<tr>
<th>Country / Global implementation</th>
<th>Viet Nam Lower Middle Income Country (LMIC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thematic area</td>
<td>Energy</td>
</tr>
<tr>
<td>Project start date</td>
<td>Q1 2017</td>
</tr>
<tr>
<td>Funding source</td>
<td>Core</td>
</tr>
<tr>
<td>2017 budget</td>
<td>USD 359,670</td>
</tr>
<tr>
<td>% of budget disbursed</td>
<td>87%</td>
</tr>
</tbody>
</table>

HIGHLIGHTS

- GGGI an MOIT signed the first MOU and project document to launch our collaboration in supporting the development of clean energy in Viet Nam.
- GGGI co-organized a kick-off meeting with Soc Trang Province and MOIT in developing the Provincial Biomass Energy Planning.
- GGGI, in collaboration with GIZ, prepared feasibility studies for five short-listed sugar mills in support of the development of bankable biomass energy projects.
- GGGI and GIZ co-organized the Investor Forum to introduce these 5 biomass energy projects to local commercial banks and international financiers and a training workshop for local commercial banks on appraising biomass energy investments.

OVERALL OBJECTIVE

- Increase the share of electricity produced by biomass waste-to-energy through strategic policy advice to the government and the development of bankable projects.
- Increase in biomass to waste-to-energy in Viet Nam’s energy mix resulting in GHG emission reduction from BAU.

RELEVANT SDGs

7.2. By 2030, increase substantially the share of renewable energy in the global energy mix.

17.9. By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

13.2. Integrate climate change measures into national policies, strategies and planning.
## RESULTS ACHIEVED IN 2017

### OUTCOME 1

**Government accepts provincial biomass energy planning.**

The overall outcome of the project is to support an increase in green energy production, and consequently a reduction in emissions, through the adoption of action plans that will be implemented and result in the financing of waste-to-energy projects. The project is on track as noted in the progress of output 1.1 below. A final draft of the Biomass Planning will be completed soon for Government’s consideration. Identifying climate finance for the initial projects is expected to motivate further sugar mills to implement the technology for biomass energy development.

### OUTPUT 1.1

**Provincial biomass energy planning developed.**

In early 2017, GGGI signed the project document with Ministry of Industry and Trade (MOIT) completing the legal requirements to start rolling out activities for biomass energy planning. Following the approval of the project document, GGGI and MOIT selected Soc Trang Province to conduct the Provincial Biomass Energy Planning. As such, in August 2017 the provincial government of Soc Trang hosted the kick-off meeting with MOIT and GGGI where the methodology to develop the biomass energy planning was presented and a working group of government officials and consultants was set up to conduct the planning. By the end of 2017, the first draft of the Planning was developed and ready for consultation. Delivery of the final Planning is on track.

### OUTPUT 2.1

**Biomass waste-to-energy project submitted to potential financiers with a goal to sign financing agreement – FINANCING.**

GGGI, in collaboration with GIZ, has prepared pre-feasibility studies of five short listed sugar mills. Following the completion of these pre-FS, GGGI is in the process of selecting the most feasible project to work with and preparing investment documents to attract local and international investment under relevant mechanism. These activities will support a bankable biomass energy business model that can be rapidly scaled up throughout Viet Nam.

### OUTCOME 2

**Finance is mobilized for biomass waste-to-energy projects.**

This outcome is on track subject to the completion of output 2.1. The identification and development of bankable biomass energy projects within the sugar sector will be accompanied by resource mobilization to fill in the investment ‘gap’. GGGI and the German Agency for International Cooperation (GIZ) are working together to support five selected sugar mills in developing pre-feasibility studies for biomass combined heat and energy plants (CHP).

### OUTPUT 2.1

**Biomass waste-to-energy project submitted to potential financiers with a goal to sign financing agreement – FINANCING.**

GGGI, in collaboration with GIZ, has prepared pre-feasibility studies of five short listed sugar mills.

- In October 2017, GGGI and GIZ co-organized an Investor Forum to introduce five pre-FS for biomass energy projects among local commercial banks and international DFIs. Together with the Investor Forum, a training workshop for local commercial banks was also conducted to build capacity on appraising biomass energy investments in which 26 mid-level bank officers (including 15 female participants) from 8 local commercial banks attended. The local banks and some international DFIs show interest in biomass energy business.
- In August 2017, GGGI, MOIT, and Soc Trang’s PPC co-organized a kicked-off workshop for the Provincial Biomass Energy Planning. At the workshop GGGI presented its activities in Viet Nam and the workplan for the biomass energy planning. The workshop has strengthened GGGI’s partnership with Soc Trang Province as well as with MOIT and paved the way for future collaboration in renewable energy.
- GGGI Vietnam contributed to the peer-review process of the IEA Flagship report “World Energy Outlook 2018 – Southeast Asia Special Analysis” which was launched in Singapore in October 2017.
**PARTNERS**

**LOCAL**
- Ministry of Industry and Trade (MOIT)
- Provincial Peoples’ Committee (PPC)
- Commercial Banks: BIDV, HDBank, Vietcombank, VIB, LienvietPost, SHB, An Binh Bank, VietinBank
- Sugar-mills: LASUCO, CASUCO, NASUCO, DakLak Sugar JSC.
- Vietnam Sugarcane and Sugar Association

**INTERNATIONAL**
- USAID
- German Agency for International Cooperation (GIZ)
- Dragon Capital
- InfraCo