

ESMS EXECUTIVE SUMMARY

The Environmental and Social Management System (ESMS) Report formulated for project *30MW Large Scale Solar Photovoltaic Plant at Lot 2556, Lot 2557, Lot 3774 & Lot 3776 Bukit Selambau, Kuala Muda, Kedah Darul Aman* which include information and guidance to contractor in environmental, social and health and safety aspect during construction and operation. This report has been made accordance with the EIA Guidelines in Malaysia, August 2016 and General EHS Guidelines: Introduction (Environmental, Health and Safety (EHS) General Guidelines): Environmental by World Bank Group. The ESMS also was referred with the International Finance Corporation, World Bank Group: Performance Standards on Environmental and Social Sustainability. This report consists of five chapters including; Chapter 1: Introduction, Chapter 2: Environmental Management Plan during construction, Chapter 3: Occupational Health and Safety, Chapter 4: Community, Health and Safety and Chapter 5: Construction and Decommissioning. Environmental aspect for this report was reflected as the Environmental Management Plan (EMP) which consist of the proposed monitoring program and mitigation measures for environmental protection during construction and operation. Meanwhile, for the fauna studies it was detail described in sub-chapter 5.1.5. The studies including the finding of related species that exists in the project site and the impacts and the mitigation measures for the fauna that will be affected form the project implementation. For the safety aspect, the emergency response plan has been made with reference to the Safety and Health Plan from the contractors. Meanwhile, for the socio survey, it was explained detailed at the sub- chapter 5.3: Community Health and Safety where it comprises the results of the socio survey that has been conducted for residents nearby the project site. From the overall studies, it was found that this report is a complete report include sufficient information about the project implementation, monitoring and evaluation of environmental program. This report also provides project acceptance in terms of social aspect from the nearby resident, contractors environmental, safety and health policy, environmental and social policy, stakeholder engagement plan that need to be implemented through the project duration. This report is an important document that have need to be updated depends on the site condition for the review of top management, contractors and sub-contractors also employees that involves in this project.

EMP EXECUTIVE SUMMARY

Introduction

1. This Environmental Management Plan (EMP) report is prepared for the project:
30MW LARGE SCALE SOLAR PHOTOVOLTAIC PLANT AT LOT 2556, LOT 2557, LOT 3774 & LOT 3776 BUKIT SELAMBAU, KUALA MUDA, KEDAH DARUL AMAN.

2. The project owner is:
TNB BUKIT SELAMBAU SOLAR SDN BHD
Pejabat Setiausaha Syarikat, Tingkat 2
Ibu Pejabat Tenaga Nasional Berhad
No. 129, Jalan Bangsar
59200, Kuala Lumpur.
Telephone : 014-2696 449
Facsimile : 603-7959 0493

3. The Main Contractor is:
TNB ENGINEERING CORPORATION SDN BHD
1701, Level 17, Block B
Menara Amcorp, 18, Persiaran Barat
Peti Surat 152, Jalan Sultan
46000, Petaling Jaya
Selangor Darul Ehsan.
Telephone : 603 -7958 2121
Facsimile : 603-7958 2626
Project Director : En. Azhar Hj. Idris

4. The Environmental Consultant and Accredited Laboratory are:

ENVIRONMENTAL SCIENCE (M) SDN BHD

Menara ES, No.9 Persiaran Industri,

Bandar Sri Damansara,

52200 Kuala Lumpur, Malaysia

Telephone : 03-6273 6013

Facsimile : 03-6275 9325

Contact Person : Siti Nazzirah Binti Mustafa

ES LABORATORIES (M) SDN. BHD

No. 18, Jalan Tago 11,

Tago Industrial Park,

Sri Damansara,

52200 Kuala Lumpur

Telephone : 03-6273 6013

Facsimile : 03-6275 9325

Contact Person : Ms Ong Poh Cheng

Statement of Need

5. 30MW Large Scale Solar Photovoltaic Plant project is a major initiative of the Government of Malaysia to promote ecologically sustainable growth and also constitute a major contribution by Malaysia to the global effort to meet the challenges of climate change.
6. New energy and renewable energy like solar power, wind and biomass have been treated as important strategic alternative source by governments over the world. Especially the photovoltaic power generation as one of the globally focused renewable energy technologies has broad developing prospects without the restriction of energy resources, raw materials and application environment.

Project Description

7. The proposed project site located at Lot 2556, Lot 2557, Lot 3774 & Lot 3776 Bukit Selambau, Kedah which is approximately 171.809 acres of overall development area. The proposed project site located in the north part of Kedah State between north latitude 05° 67'2149"N and east longitude 100° 62'3326"E.
8. The proposed project only involves the installation of a skeleton tube iron to orient solar direction. Equipment such transformers and switches will be installed in portable containers. The entire solar plant component easily dissolves its structure to be disposed of when not working again.
9. The development schemes are proposed to allocate a utilities building, guard cabin, main entrance substation (PMU) and an onsite detention pond. All components are temporary infrastructure. The utilities building is including of office space, toilets and so on for the use of staffs. The utilities building and guard cabin made up of removable container structure.

Impact and Mitigating Measures

10. The potentially significant impacts, mitigation measures and residual impacts during the pre-construction, construction and operational phases are included in **Chapter 7**.

Environmental Management Framework

11. An environmental Monitoring program has been proposed with four (4) water quality sampling points, two (2) for air quality and noise level monitoring points.

Conclusion

12. This EMP highlights significant impacts that are likely to occur especially during construction stage. It also outlined in detail the mitigation measures to be implemented in order to reduce impacts of the pollution. With the proper implementation of the mitigation measures, the environmental impacts highlighted in this EMP can be minimized.