Summary Initial Environmental Examination
Project Number: 40682-013
May 2014

People’s Republic of China: Integrated Renewable Biomass Energy Development Project – Shandong Province

Prepared by: Liangshan Environmental Monitoring and Supervision Agency
For: Technology-Introduction Office of Shandong Provincial Department of Agriculture

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Asian Development Bank
## Summary of Non-core subproject IEE

<table>
<thead>
<tr>
<th>1. 项目名称（Name of project）:</th>
<th>Shandong Kelong Livestock Industry Co., Ltd Biogas Project</th>
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<tr>
<td>2. 项目位置（Location of project）:</td>
<td>Wangzongkou Village, Guanyi Town, Liangshan County, Jining City, Shandong Province</td>
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<td>3. 鉴定单位（Evaluation unit）:</td>
<td>Liangshan Environmental Monitoring and Supervision Agency</td>
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<td>4. 项目投资规模（Project investment, US$）</td>
<td>TOTAL investment cost, US$: 2.97 million</td>
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<td>汇率（exchange rate）:</td>
<td>1 US$ = 6.14 CNY</td>
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<td>亚行贷款（ADB loan amount, US$）:</td>
<td>1.5 million</td>
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<td>配套资金（Counterpart fund, US$）:</td>
<td>1.48 million</td>
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<td>5. 建设内容（Construction content）:</td>
<td>(1) location, type and scale of farm, and the amount of waste(位置，农场类型和规模和废物的数量) Location: Wangzongkou Village, Guanyi Town, Liangshan County, Jining City, Shandong Province Type and scale of the farm: Cows, cattle, sheep breeding farm with 12,000 ㎡ Amount of waste: Daily production of cattle, sheep manure is about 60 tons, cattle, sheep urine approximately 70 m³/d, and barn, sheep shed washing wastewater is about to 20 m³/d. (2) Type of biogas plant, equipment used, (沼气厂和使用设备的类型) The construction of this project 2500m fand anaerobic tank 1, 120kW biogas power generation unit 2 sets, and supporting the construction of biogas purification pool, room, equipment room and other ancillary facilities. (3) Amount of biogas generated, uses of biogas, uses of slurry and sludge (沼气产量，沼气的使用，沼渣沼液的使用) After the completion of the project, with an annual output of 912 thousand and 500 m biogas fand, all used for power generation, power generation 1 million 825 thousand kWh h 1500t, with an annual output of biogas residue, biogas slurry fertilizer 33 thousand T, used in the field and the surrounding ecological vegetable production. (4) Construction and operational period (建设期和运作期) The project construction period is two years and the project will run for 20 years.</td>
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<td>6. 重大环境影响（Major environmental impacts）:</td>
<td>In the construction and operation of the biogas plant, dust, noise, waste water and solid waste must be produced. As an animal waste treatment project, the emissions generated by the project are mainly resulted from the collection of the</td>
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manure from the animal breeding centers by odor and the noise pollution and dust from the generator sets nearby the generator house. Other minor emissions may come from the processing of the feedstock by odor and the treatment of the solid waste generated in the process of desulfurization for biogas purification.

The mitigation measures for the environmental impacts have been considered in the stage of project technical design, like the use of the tank truck for manure transportation, the noise-absorption materials and containers for installation of the generator sets, good arrangement design of the processing installations, proper package and treatment of the solid wastes during the project operation, and etc.

In conclusion, the project has less impact on the surrounding environment.

7. Environmental management plan and staff to implement the plan (环境管理计划和执行人员分工)

The project has developed a complete EMP, detailed planning of environmental mitigation measures, environmental management, environmental supervision, environmental monitoring and other aspects.

The EIA administration agencies are as follows:

Environmental Protection Office of Shandong Province: In accordance with the requirements of relevant domestic laws and regulations, it is responsible for project supervision of the whole process;

Jining Municipal Environmental Protection Bureau: In accordance with the requirements of the Office of Environmental Protection, Shandong Province, it will perform the project supervision of the whole process;

Liangshan Environmental Monitoring and Supervision Agency helps build a party that responsible for supervising the implementation of environmental protection measures on the construction site, assists the environmental staff to develop the environmental management guidelines for routine environmental monitoring during the operation of the biogas plant;

Environmental staff: Besides the monitoring and supervision from the governmental agencies, 2 technicians from the Shandong Kelong Livestock Industry Co., Ltd will be engaged for implementation of the environmental management plan to monitor and mitigate the impacts of the environmental pollutions during the project construction and operation. They will do their best.

8. IEE approval date and agency (attach a photocopy of the approval letter) 初步环评批复日期和机构名称（附上批复信的复印件）

IEE approval date: May 23, 2014
Agency: Liangshan Environmental Monitoring and Supervision Agency

注：建设期：指项目启动到完工；运行期：指项目建设结束投入实际运行至还款结束的期间；
执行人员指：负责环境管理与监测的人员
审批意见：

山东科龙畜牧产业有限公司：

你公司呈报的《山东科龙畜牧产业有限公司畜禽粪污制备沼气发电并网项目环境影响报告表》已收悉，根据有关环保法律法规规定，经研究批复如下：

一、山东科龙畜牧产业有限公司在梁山县馆驿镇建设了济宁青山羊保种场，羊场总存栏数量达到1000只以上，该项目位于梁山县馆驿镇王口村南1100米路东，投资1826.03万元建设2500立方米厌氧罐1座，120kW沼气发电机组2套，并配套建设沼液池、净化间、设备房等附属设施。项目建成后，年产沼气91.25万立方米，全部用于发电，年发电182.5万kW·h，年产量沼液泥1500t，沼液泥3.3万t，用于本场及周边生态果蔬生产，用于本场及周边生态果蔬生产。根据国家发改委2011年第9号令《产业结构调整指导目录》（2013年修正）该项目属允许类项目，符合国家产业政策。要求企业落实好报告表中提出的污染治理措施，确保各项污染物达标排放的前提下，我局同意按照《报告表》中所列建设项目性质、工艺、规模、地点、环境保护措施进行项目建设。

二、该项目要落实好以下环保措施和达到以下环保标准要求：

1. 废水
项目生活污水经场区污水管道由沼气池收集处理，不外排。

2. 废气
落实沼气脱硫处理措施，确保燃烧后废气满足《山东锅炉大气污染物排放标准》（DB37/2347-2007）表1规定排放标准后，经不低于8米高的排气筒排放；加强场区及周边绿化，封闭主要恶臭污染物源，及时清洗池塘，控制恶臭污染物的排放，确保场界的废气排放浓度符合《恶臭污染物排放标准》（GB14554-93）二级标准。

3. 固体废物
项目运营过程中产生的沼渣、沼液经无害化处理后达《粪便无害化卫生标准》（GB7959-87）后外售做农肥，不外排；废脱硫剂集中收集由厂家回收，生活垃圾分类收集后委托环卫部门集中处理，不外排。

4. 噪声
对主要噪声声源采取隔声、消声及安装减振基础等措施，确保场界噪声符合《工业企业厂界环境噪声排放标准》（GB12348-2008）2类区标准要求。

三、该项目建设严格执行污染防治设施与主体工程同时设计、同时施工、同时投入使用的“三同时”制度，经我局同意方可进行试生产。试运营三个月内向我局申请工程竣工环境保护验收。

四、本批复仅限于在上述地址建设山东科龙畜牧产业有限公司畜禽粪污制备沼气发电并网项目。建设单位如建设性质、规模、地点、产品品种、原辅材料及采用的生产工艺或防治污染、防止生态破坏的措施发生重大变动的，必须重新办理环保手续。

五、请梁山县环境监察大队对该项目“三同时”执行情况和此批复的要求落实情况进行监督管理。

经办人（签字）：

抄送：梁山县环境监察大队