Operationalizing and implementing the Biofuel Sustainability Framework for Mozambique
Operationalization and implementation of the Biofuel Sustainability Framework for Mozambique

Colofon

Date September 2012
Status Final report

This study was carried out in the framework of the Netherlands Programmes Sustainable Biomass by

Name organisation Wageningen University
Contact person Maja Slingerland

Although this report has been put together with the greatest possible care, NL Agency does not accept liability for possible errors.
Contact

Netherlands Programmes Sustainable Biomass

Ir. Kees W. Kwant and Drs. Carmen Heinze
NL Agency
NL Energy and Climate Change
Croeselaan 15, 3521 BJ Utrecht
P.O. Box 8242, 3503 RE Utrecht
The Netherlands
Email: kees.kwant@agentschapnl.nl
Phone: +31 - 88 - 602 2458
www.agentschapNL.nl/biomass

Organisation 1

Ir. Nuria Cunha Soares, Dr. Marc Schut, Dr. Ir. M.A. Slingerland,
Wageningen University
Plant Production Systems
Droevendaalse steeg 1, 6708 PB Wageningen
PO Box 430, 6700 AK Wageningen
The Netherlands
Tel:  +31 - 317 – 483 512
E-mail: maja.slingerland@wur.nl
1 Introduction

2 Activities performed along the development process
   2.1 Making use of existing legislations and legal procedures
   2.2 Stakeholder participation
   2.3 Institutional pilot-study

3 Results
   3.1 The framework
   3.2 The legal procedures

4 Policy actions and recommendations

Annex 1: Regulation of the Biofuel Sustainability Framework

Annex 2: Annexes to the Regulation of the Biofuel Sustainability Framework

ANNEX I
ANNEX II
ANNEX III
ANNEX IV
ANNEX V
ANNEX VI
ANNEX VII
1 Introduction

Climate change, rising oil prices and concerns about future energy supplies have led to a growing interest in the use of biomass for energy purposes. Several studies have shown the potential for the production and processing of biofuel feedstock on the African continent, either for domestic use or for export. Mozambique is seen as a promising country for biofuel production. The country has favourable growing conditions, and the availability of land, water and labour contribute considerably to the country’s biofuel production potential.

However, the production of biomass energy crops can also result in negative environmental and socio-economic impacts, such as changing land-use patterns and competition with food production. In order to deal with these impacts, some countries (UK, Netherlands), multi-stakeholder platforms (Roundtable for Sustainable Biofuels) and supra-national institutions (European Union, EU) have developed sustainability criteria for biofuel production. The implementation of such biofuel sustainability criteria will have clear consequences for biofuel production in Mozambique, and for the biofuel investors in the country that intend to export part of their produce to countries in the EU, such as the Netherlands.

In order to guide biofuel investments and production in the country, the Mozambican government established an Inter-ministerial Biofuel Commission and developed a National Biofuel Policy and Strategy (Resolution No. 22/2009). Five inter-ministerial subgroups are responsible for the operationalization and implementation of the Policy and Strategy. One of the groups is the Subgroup Sustainability Criteria (hereafter abbreviated as Subgroup) that is responsible for the development of a national strategy for sustainable biofuel production that reflects the Mozambican reality and long-term market-requirements for developing a sustainable biofuel sector.

Between December 2008 and November 2010 (first phase), Wageningen University (WUR) formed part of a Technical Secretariat that actively supported the work of the Subgroup. A framework including biofuel sustainability principles and criteria, and a guide for implementation have been developed in a multi-stakeholder setting. From July 2011 to July 2012 (second phase), WUR continued to actively support the Subgroup in the operationalization and implementation of the framework by adding sustainability indicators and verifiers to the criteria and by developing a guide for biofuel investors. This assignment was commissioned by NL Agency (Netherlands Ministry of Economic Affairs, Agriculture and Innovation), and at the same time, supports the Netherlands Sustainable Biomass Programs by providing a more secure investment framework for (Dutch) biofuel investors in Mozambique.

This report summarizes the main activities performed during the second phase. Important choices made during this phase are presented, (chapter 2), as well as the policy actions that still need to be taken for the framework to be approved as a decree by the Mozambican Council of Ministers (chapter 3).
Activities performed along the development process

The vision during the development process of the framework was to create and implement a scheme that will be mutually beneficial for biofuel investors in Mozambique, the Mozambican government and society, and for importing countries such as the Netherlands. More specifically, the aim was to develop a framework that would create a more clear and transparent investment climate for biofuel investments in Mozambique and improve access of Mozambican biomass for energy to the international market of sustainable biomass for energy uses, which can contribute to securing the import of sustainably produced and processed biomass for energy, transport or chemical purposes in the EU.

2.1 Making use of existing legislations and legal procedures

To facilitate the implementation of the framework, reduce compliance costs and increase transparency in the system of production, processing, and commercialization of biofuels, the framework was designed to be compatible with existing legislations in Mozambique. Therefore, a comparison was made between the sustainability criteria developed during the first phase and twenty Mozambican laws, regulations and legal procedures. The purpose of this exercise was to cover the sustainability criteria with indicators found in the existing legislation rather than to create new ones.

This exercise resulted in a long-list of ninety-eight indicators that covered nine of the twenty criteria. Hence, three steps were taken to reduce the long-list of indicators and cover the remaining eleven criteria. First, the criteria were revised in order to avoid repetition, resulting in the reduction of the number of criteria to fifteen. Some criteria had the same objective but had been formulated differently and it was not possible to operationalize two criteria. Second, the indicators found in the Mozambican legislation were unequal in terms of formulation and specificity. For that reason, an extra layer was included in the framework hierarchy; beside principles, criteria and indicators, a list of verifiers were added to the indicators. Verifiers are data or information that enhances the specificity of an indicator making it easier to assess. Third, two international sustainability schemes were identified and compared to the Mozambican framework to fill formulation and procedural gaps – being the Roundtable on Sustainable Biofuels and the Dutch Technical Agreement NTA 8080, which have been approved by the European Commission as qualified schemes for the EU’s biofuel targets under the Renewable Energy Directive.

In relation to implementation the framework, two existing legal procedures were already in place: the Project Application and Land Acquisition Processes. Biofuel operators have to comply with these two processes for their projects to be approved and be considered sustainable. The evaluation of projects involves several ministries and their directorates at different stages of the biofuels production chain. An analysis of both process have been performed during the second phase, and although some obstacles were identified, the Subgroup and the Technical Secretariat were of the opinion that the processes provide a solid basis for the implantation of the framework.
2.2 Stakeholder participation

Involving stakeholders in the elaboration of the biofuels sustainability framework did not only take place because it is stipulated in the Biofuels Policy and Strategy, but also because it was expected to result in a more profound image of the social, economic, environmental and legal challenges related to the production, processing and use of biofuels in Mozambique, as well as the principles, criteria, indicators and verifiers to deal with these challenges.

Three regional stakeholder workshops were organized in which a draft of the framework was presented to the private sector, civil society and governmental organizations with the objective to collect insights and feedback that could be used to increase the quality and the acceptability of the framework. More specifically, the sustainability indicators and verifiers and legal procedures were discussed with the stakeholders. The regional workshops took place in Maputo (south), Beira (centre) and Nampula (north) with the participation of stakeholders coming from the different provinces. Main issues raised by the stakeholders during the discussions concerned an effective implementation of the framework and enforceability by relevant governmental institutions; improved communication between and across national and provincial institutions; and the inclusion of environmental indicators and verifiers related to the protection of soil, water, air and the reduction of greenhouse gas emissions.

2.3 Institutional pilot-study

The framework is based on the Mozambican regulations and legal procedures. These regulations and legal procedures concern different ministries and departments, at the national and provincial level. The objective of the pilot-study was to facilitate the discussion about the feasibility of the use of the indicators through the legal procedures and to reach consent about responsibilities of each partaking ministry and department regarding the application of specific sustainability indicators.

Four national departments were requested to collaborate. Due to the lack of time, the pilot-study was carried out at the national level only, by the following departments: the Investment Promotion Centre (CPI) of the Ministry of Planning and Development; the Agriculture Promotion Centre of the Ministry of Agriculture; the National Directorate for New and Renewable Energies of the Ministry of Energy, and the National Directorate for Environmental Impact Assessment of the Ministry for the Coordination of Environmental Affairs.

To stay closer to reality, two existing projects were identified as a case study to be assessed with the framework by the four departments mentioned above. These projects had not yet been formally evaluated. The first project has a component that concerned the production of ethanol from cassava and the second project concerned the production of jatropha for biodiesel. Both projects entail several activities of the biofuel production chain.
3 Results

3.1 The framework

The framework consists of principles, criteria and indicators with their verifiers. After the consultation process seven principles remained that can be distributed over the three sustainability domains as represented in figure 1.

![Figure 1: the chosen principles arranged according to the three dimensions of sustainability](image)

The principles and their criteria are presented in the Regulation of the Biofuel Sustainability Framework (Annex 1 of this report). The indicators and verifiers are presented as an annex to the regulation called ANNEX 1 (which is annex 2 of this report).

3.2 The legal procedures

As has been mentioned the developed framework has been shaped to fit into two main existing legal procedures: the project application procedure to follow to acquire approval of an investment proposal (CPI process) and the procedure to acquire a (provisional) land title (DUAT). Both procedures are carried out in parallel and meet each other (see red circle in figure 2).

After the development of the framework the steps to follow by investors are modified as the investors have to comply with the framework. Their steps are:

- Investor hands in the investment proposal to the Investment Promotion Centre Advantages. This is important because only CPI can grant fiscal benefits.
- Investor complies with the prerequisites listed in the framework. The framework (see annex) will be distributed allowing investors to know the evaluation criteria in advance.
- Investor provides additional information when necessary.
The ministries have to evaluate the investment proposal and may decide on its approval (step 2a-2c left side figure 2). This has to lead to an integrated decision. All departments will make use of the whole framework to assess the investment proposals, however focusing on the indicators that concern them the most:

- CPI: indicators of principles 1 and 4
- MINAG: indicators of principles 1, 2, 4, 5 and 6
- ME: indicators of principles 1 and 3
- MICOA: indicators of principles 1 and 7

The framework provides transparency about responsibilities of the respective ministries and departments when evaluating investment proposals as the different criteria fit into their respective domains.
4 Policy actions and recommendations

Approval of the framework by the Council of Ministers is still needed before its implementation. The framework was presented to the Minister and Vice-minister for the Coordination of Environmental Affairs on May 17 2012 and to the Minister of Energy on May 23 2012. All ministers, as well as their council members unanimously approved the framework. On June 7 2012 the last draft of the framework was presented to the private sector, civil society and governmental organizations during a final seminar to obtain the last inputs and to close the development process of the framework (see annexes). Nevertheless, three more policy actions have to be taken before the implementation of the framework (Figure 3).

Figure 3: policy actions

National Council for Sustainable Development
The National Council for Sustainable Development (CONDES) is an advisory body to the Council of Ministers, which ensures coordination and integration of the environmental management of activities in the development process of Mozambique. Its main objective is to ensure that environmental issues are taken into account in the decision-making process. The presidency of this body is occupied by the Prime Minister and the vice-chair by the Vice-minister for the Coordination of Environmental Affairs. The framework will be debated at CONDES’ technical and advisory sessions.

Inter-Ministerial Biofuel Commission
The Inter-Ministerial Biofuel Commission (CIB) was created to assure the implementation of the Biofuel Policy and Strategy. It is composed by the Ministers of Energy (president), Agriculture (vice-president), Industry and Commerce, Coordination of Environmental Affairs, and Science and Technology. The commission meets twice a year and will evaluate the framework on its content and whether it is consistence with the biofuel legal framework (i.e. all biofuel-related legislations developed so far).

Council of Ministers
After the framework is approved by CONDES and CIB, it becomes easier to be approved by the Council of Ministers. As said before, the prime minister is the head of CONDES and several ministers are members of CIB. The framework will be first sent to the technical secretariat of the Council of Ministers and then presented by the Minister of Energy (also the head of CIB) to the council for approval.
Recommendations

During the project period an institutional pilot has been done to verify whether the governmental institutions could work with the framework. However another pilot is recommended from the side of the investor. The pilot should consist of providing an investor with the framework before he hands in the proposal and then evaluating to what extent the investor was capable to comply. It might be that further information is needed to explain criteria, indicators or verifiers.

The framework is intended to be also applicable to already approved projects, especially when they fell short to some indicators and are therefore part of re-evaluation. Although the projects that have been approved before the framework came into existence cannot be held accountable for not following it, a pilot with them may provide insights in the feasibility of improvements towards full compliance to the framework.
Annex 1: Regulation of the Biofuel Sustainability Framework

The framework in this annex was presented to stakeholders on June 7 2012 during the final seminar of the second phase in order to obtain the last inputs to improve the framework and close the development process of the framework. It is important to highlight that the version presented here has not a legal status yet, as the framework still requires approval by the Mozambican Council of Ministers.

CHAPTER I
Definitions and Objectives

ARTICLE 1 Definitions

For the purposes of this Regulation, the terms hereunder have the following definitions:

a) **Biofuel wholesalers** – operators that receive, (un)load, pack and conserve biofuel raw materials or (semi-)finished biofuel products;

b) **B3** – blending of diesel-pure biodiesel, containing 97% in volume of diesel and 3% in volume of biodiesel;

c) **Biofuel** – fuel made from biomass;

d) **Biodiesel** – methyl ester produced from chemical conversion (transesterification reaction) of animal or vegetable oils with an alcohol, in the presence of a catalyst and with a fuel quality for diesel motors, to be used as a biofuel;

e) **Bioethanol** – ethyl alcohol produced from biomass and/or biodegradable waste to be used as a biofuel;

f) **Anhydrous bioethanol** – ethyl alcohol with up to 1% of water in its composition;

g) **Land Use and Benefit Right (DUAT)** – the right that natural or legal persons and local communities acquire over land, with the requirements and limitations set forth in the Land Law (Law No. 19/07);

h) **Biofuel distributors** – operators that transfer biofuels from the producer to the final consumer;

i) **E10** – blending of gasoline-anhydrous ethanol, containing 90% in volume of gasoline and 10% in volume of ethanol;

j) **Biofuel exporters** – operators who export biofuels to foreign markets;

k) **Biofuel feedstock exporters** – operators that export crude or semi-processed biofuel feedstock to foreign markets;

l) **Biofuel feedstock processors** – operators that process biofuel feedstock with physical/chemical properties that facilitate biofuel production;

m) **Biofuel producers** – operators that process vegetable and/or animal biomass to obtain liquid fuels;

n) **Biofuel feedstock producers** – operators of vegetable biomass destined for biofuel production.

ARTICLE 2 Objectives

This Regulation defines the evaluation procedures to be followed when assessing commercial biofuel investment proposals.
CHAPTER II  

Legality

ARTICLE 3

Principle 1: Biofuel operations shall respect all applicable laws, regulations and legal procedures

1. Biofuel operations shall comply with all applicable laws, policies and strategies and with all existing customary and informal rights related to the use and access to land, water and other natural resources.
3. For the purposes of this Article indicators set out in Annex I shall be obeyed.

CHAPTER III

Social Responsibility

ARTICLE 4

Principle 2: Biofuel operations shall contribute to local development, while minimizing health risks

1. Community consultation shall be based on free, prior, and informed consent, through a consensus-driven and well-documented process (Land Law: Law No. 19/97; Land law regulations: Decree No. 66/98; Technical annex to the land law regulations: Ministerial Diploma No. 29-A/2000; Land planning law: Law 19/2007).
2. Biofuel operations shall contribute to local socioeconomic development.
3. Biofuel operations shall minimize risks for public health and ensure hygiene and safety at the workplace.
4. For the purposes of this Article indicators set out in Annex II shall be obeyed.

CHAPTER IV

Energy Security

ARTICLE 5

Principle 3: Biofuel operations shall contribute to energy security

1. Biofuel operations shall contribute to a sustainable diversification of the national energy matrix (Biofuels policy and strategy: Resolution No. 22/2009; Biofuels blending regulations: Decree No. 58/2011); Biofuels technical regulations: forthcoming; Regulations for licensing activities of production, storage, export, transport and commercialization of biofuels: Ministerial Diploma forthcoming).
2. For the purposes of this Article indicators set out in Annex III shall be obeyed.

CHAPTER V

Economic and Financial Viability

ARTICLE 6
Principle 4: Biofuel operations shall be economically and financially viable

1. Biofuel operations shall be economically and financially viable (Investment law: Law No. 36/95; Investment law regulations: Decree No. 36/95; Project application form; Procedures for the presentation and appreciation of investment proposals involving extension areas above 10.000 hectares: Resolution No. 70/2008).
2. For the purposes of this Article indicators set out in Annex IV shall be obeyed.

CHAPTER VI
Food Security

ARTICLE 7
Principle 5: Biofuel operations shall not compromise local food security

1. Biofuel operations shall not compromise local food security by maintaining the availability of and access to staple food.
2. For the purposes of this Article indicators set out in Annex V shall be obeyed.

CHAPTER VII
Agricultural and Industrial Productivity

ARTICLE 8
Principle 6: Biofuel operations shall contribute to improved agricultural and industrial productivity

1. Biofuel operations shall continuously improve agricultural and industrial productivity and the effective use of resources.
2. Biofuel operations shall facilitate technology transfer and knowledge sharing to smallholders.
3. For the purposes of this Article indicators set out in Annex VI shall be obeyed.

CHAPTER VIII
Environmental Protection

ARTICLE 9
Principle 7: Biofuel operations shall reduce the risk of environmental degradation

1. Biofuel operations shall contribute to the reduction of greenhouse gas emissions (GHG) as compared to fossil fuels (Biofuel policy and strategy: Resolution No. 22/2009).
2. Biofuel operations shall carry out an Environmental Impact Assessment (Environmental law: Law No. 20/97; Regulation about the environmental impact assessment: Decree No. 45/2004; General directive for the elaboration of environmental impact studies: Ministerial Diploma No. 129/2006; Manuel of procedures for environmental licensing; General directive for the public participation process: Ministerial Diploma No. 130/2006; Forest and wildlife law: Law No. 10/99).
3. Biofuel operations shall minimize negative impacts on biodiversity, ecosystem and conservation values.
4. Biofuel operations shall minimize the soil and air pollution (General directive for the public participation process: Ministerial Diploma No. 130/2006).

5. Biofuel operations shall minimize negative impacts on water resources (General directive for the public participation process: Ministerial Diploma No. 130/2006).

6. For the purposes of this Article indicators set out in Annex VII shall be obeyed.

CHAPTER IX

Sustainability Assessment of Biofuel Operations

ARTICLE 10
Assessment

Two moments have been identified as relevant for assessing the sustainability of biofuel projects:

1. To have access to land as outlined in the Land Law (Law No. 19/97) and certain fiscal benefits outlined in the Code of Fiscal Benefits (Decree No. 16/2002), biofuel operators have to present evidence and perspectives on the environmental, economic and social impacts of the project. Depending on the project, the information is analyzed at national and/or provincial level by the Investment Promotion Centre (CPI), the Ministry of Agriculture (MINAG), the Ministry of Energy (ME) and the Ministry for the Coordination of Environmental Affairs (MICOA).

2. After two years, the contract under which the Land Use and Benefit Right (DUAT) was granted is evaluated. This monitoring activity is an opportunity to review compliance with this Regulation by the biofuel projects that are under implementation.

The DUAT can, consequently, be revoked if biofuel operators are missing such compliance.

CHAPTER X

Compliance

ARTICLE 11
Obligation to inform

The biofuel operator must provide information on the following indicators at the beginning of the project:

1. 1.1.1, 1.1.2, 1.2.1, 1.2.2, 2.1.1, 2.2.1, 2.2.2, 2.3.1, 2.3.2, 4.1.1, 5.1.1, 6.1.1, 6.2.1, 7.2.1, 7.3.1, 7.4.1, 7.4.2, 7.5.1.

2. The parameters for the application of this Article are set out in Annex I to VII.

ARTICLE 12
Obligation to comply

The biofuel operator of a new or existing biofuel operation must meet annually with the following indicators:

1. 1.1.1, 1.2.1, 1.2.2, 1.2.4, 2.1.1 (verifier 9 and 10), 2.2.1 (verifier 2), 2.2.2, 2.2.3, 2.3.1, 2.3.2, 3.1.1, 4.1.1 (verifier 1, 2 e 3), 5.1.1, 6.1.1, 6.2.1, 7.1.1, 7.2.1, 7.3.1 (verifier 8), 7.4.1 (verifier 1, 3 e 4), 7.4.2 (verifier 2), 7.5.1 (verifier 4, 6, 10, 11 and 13).

2. The parameters for the application of this Article are set out in Annex I to VII.
CHAPTER XI

Inspection, offences, penalties

ARTICLE 13
Inspection of new biofuel projects

Without prejudice to other entities with oversight functions, it is the responsibility of CPI, MINAG, ME and MICOA (inter-ministerial team) to perform monitoring activities using the following mechanism:

1. 12 months after the start of the project:
   a. 0% - 60% implementation of the indicators = non-compliance with the framework. Send a warning and attach all the improvements to be made within 6 months. An extra monitoring visit is carried out in the 18th month.
   b. 61% - 99% implementation of the indicators = compliance with the framework. Send a warning and attach all the improvements to be made within 1 year to comply 100% with the framework.

2. 18 months after the start of the project:
   a. In case of non-compliance with the framework, send a warning and attach all the improvements to be made within 6 months to comply 100% with the framework.

3. 24 months after the start of the project (acquisition phase of the definitive DUAT):
   a. In case of non-compliance with the framework, cancel the fiscal benefits and do not award the definitive DUAT until 100% compliance with the framework. Send a warning and attach all the improvements to be made within 6 months to comply 100% with the framework. An extra monitoring visit is carried out after 6 months.
   b. In case of force majeure, the biofuel operator consults CPI (national/provincial level) to examine the case and decide on whether to grant the tax benefits.
   c. In case of force majeure, the biofuel operator consults MINAG (national/provincial level) to examine the case and decide on whether to grant the definitive DUAT.

4. The monitoring of biofuel projects that comply 100% with the framework is carried out biennially.

ARTICLE 14
Inspection of existing biofuel operations

Without prejudice to other entities with oversight functions, it is the responsibility of CPI, MINAG, ME and MICOA (inter-ministerial team) to perform monitoring activities using the following mechanism:

1. 12 months after the first visit to the existing biofuel operation:
   a. 0% - 60% implementation of the indicators = non-compliance with the framework. Send a warning and attach all the improvements to be made within 6 months. An extra monitoring visit is carried out in the 18th month.
   b. 61% - 99% implementation of the indicators = compliance with the framework. Send a warning and attach all the improvements to be made within 1 year to comply 100% with the framework.

2. 18 months after the first visit to the existing biofuel operation:
   a. In case of non-compliance with the framework, send a warning and attach all the improvements to be made within 6 months to comply 100% with the framework.
   b. In case of force majeure, the biofuel operator consults CPI (national/provincial level) to examine the case and decide on whether to grant the tax benefits.
   c. In case of force majeure, the biofuel operator consults MINAG (national/provincial level) to examine the case and decide on whether to grant the definitive DUAT.

3. 24 months after the first visit to the existing biofuel operation:
   a. In case of non-compliance with the framework, cancel the fiscal benefits until 100% compliance with the framework.
Send a warning and attach all the improvements to be made within 6 months to comply 100% with the framework. An extra monitoring visit is carried out after 6 months.

b. In case of force majeure, the biofuel operator consults CPI (national/provincial level) to examine the case and decide on whether to cancel the fiscal benefits.

4. 36 months after the first visit to the existing biofuel operation:
   a. In case of non-compliance with the framework, analyze the project and discuss the repeal of the definitive DUAT.
   b. In case of force majeure, the biofuel operator consults the Ministry of Agriculture (national/provincial level) to examine the case and decide on whether to repeal the definitive DUAT.

5. The monitoring of biofuel projects that comply 100% with the framework is carried out biennially.

ARTICLE 15
Offences

Under offences in this Regulation is understood:
1. Performing biofuel activities without complying with the principles, criteria, indicators and verifiers defined in this Regulation.

ARTICLE 16
Penalties

1. The cost for the extra monitoring activities defined in Articles 12 and 13 of this present Regulation shall be borne by the biofuel operator, without prejudice to other penalties outlined in other legislations.

2. Being this Regulation based on other legislations, specific penalties outlined in these will be applied.
Annex 2: Annexes to the Regulation of the Biofuel Sustainability Framework

ANNEX I

Indicator 1.1.1: The biofuel operator provides evidence demonstrating compliance with the applicable laws, regulations and legal procedures and with the informal and customary rights.

<table>
<thead>
<tr>
<th>ENVIRONMENT</th>
<th>SOCIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Verifiers</strong> (require compliance by the biofuel operator)</td>
<td></td>
</tr>
<tr>
<td>1. License/concession for the use and benefit of water, if necessary (Legislation: Water law).</td>
<td>Evaluate compliance with the prerequisites set out in the legislation.</td>
</tr>
<tr>
<td>2. Environmental Impact Assessment (Legislation: Environmental law; Regulation about the environmental impact assessment; General directive for the elaboration of environmental impact studies; Manuel of procedures for environmental licensing; General directive for the public participation process; Forest and wildlife law).</td>
<td>Evaluate compliance with the prerequisites set out in the legislations.</td>
</tr>
<tr>
<td>3. Permit to discharge pollutants, if necessary (Legislation: Regulation about the standards of environmental quality and effluent emission).</td>
<td>Evaluate compliance with the prerequisites set out in legislation.</td>
</tr>
<tr>
<td><strong>Evaluation guide</strong> (guideline for the assessor of biofuel projects)</td>
<td></td>
</tr>
</tbody>
</table>

SOCIAL

4. Land use and benefit right (Legislations: Land law; Land law regulations; Technical annex to the land law regulations; Land planning law). Evaluate compliance with the prerequisites set out in the legislations. – Biofuel feedstock producers; – Biofuel feedstock processors; – Biofuel producers; – Biofuel wholesalers.

5. Evidences of work relations: salary, working hours, non-discrimination, health and safety (Legislation: Labor law). Evaluate compliance with the prerequisites set out in the legislation. – Biofuel feedstock producers; – Biofuel feedstock processors; – Biofuel feedstock exporters; – Biofuel producers; – Biofuel exporters;
6. Approval of the investment proposal (Legislations: Investment law, Investment law regulations; Code of fiscal benefits; Project application form).

- Biofuel wholesalers;
- Biofuel distributers.

Evaluate compliance with the prerequisites set out in the legislations.

- Biofuel feedstock producers;
- Biofuel feedstock processors;
- Biofuel feedstock exporters;
- Biofuel producers;
- Biofuel exporters.

7. Approval of the investment proposal (Legislation: Procedures for the presentation and appreciation of investment proposals involving extension areas above 10.000 hectares).

Evaluate compliance with the prerequisites set out in the legislation.

- Biofuel feedstock producers;
- Biofuel feedstock processors;
- Biofuel producers;
- Biofuel wholesalers.

8. License for biofuels production, storage, processing, export and transport (Legislations: Biofuels policy and strategy; Biofuels blending regulations; Biofuels technical regulations; Regulations for licensing activities of production, storage, export, transport and commercialization of biofuels).

Evaluate compliance with the prerequisites set out in the legislations.

- Biofuel producers;
- Biofuel exporters;
- Biofuel wholesalers;
- Biofuel distributors.

Indicator 1.1.2: The operator of biofuels, national and foreign, enjoys tax benefits when complying with the Biofuels Sustainability Framework (Code of Fiscal Benefits: Decree No. 16/2002).

### Verifiers

(Verifiers: require compliance by the biofuel operator)

1. All biofuels investment proposals must be handed in at the national or regional departments of the Investment Promotion Centre.

### Evaluation guide

(Evaluation guide: guideline for the assessor of biofuel projects)

Evaluate the biofuels investment proposals as stipulated in relevant legislations.

### Who should comply

- Biofuel feedstock producers;
- Biofuel feedstock processors;
- Biofuel feedstock exporters;
- Biofuel producers;
- Biofuel exporters;
- Biofuel wholesalers.
Indicator 1.2.1: The biofuel operator provides evidence demonstrating that forced labor does not occur.

<table>
<thead>
<tr>
<th>Verifiers (require compliance by the biofuel operator)</th>
<th>Evaluation guide (guideline for the assessor of biofuel projects)</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Respect the minimum wage.</td>
<td>Verify that workers are not being paid below minimum wage and that working hours are being respected (annually, the biofuel operator has to hand in a report containing general information of the workers, as well as the monthly wages and weekly working hours).</td>
<td>– Biofuel feedstock producers; – Biofuel feedstock processors; – Biofuel feedstock exporters; – Biofuel producers; – Biofuel exporters; – Biofuel wholesalers; – Biofuel distributors.</td>
</tr>
<tr>
<td>2. Control that the normal working hours does not exceed 48 hours per week and 9 hours per day.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Control that the workers do not exceed 96 hours of overtime per quarter, not working more than 8 hours of overtime per week, nor exceeding 200 hours per year.</td>
<td>During the monitoring visits interview the workers to ensure that the data provided are complete and correct.</td>
<td></td>
</tr>
<tr>
<td>4. Record general information of the workers (e.g. name, age, address), as well as the monthly income and weekly working hours.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Indicator 1.2.2: The biofuel operator encourages workers to freely associate in professional organizations/trade unions.

<table>
<thead>
<tr>
<th>Verifiers (require compliance by the biofuel operator)</th>
<th>Evaluation guide (guideline for the assessor of biofuel projects)</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Inform workers about the possibilities to engage in works council/trade unions.</td>
<td>During the monitoring visits verify whether incentives were created for workers to freely engage in works council/trade unions.</td>
<td>– Biofuel feedstock producers; – Biofuel feedstock processors; – Biofuel feedstock exporters; – Biofuel producers; – Biofuel exporters; – Biofuel wholesalers; – Biofuel distributors.</td>
</tr>
<tr>
<td>2. Provide training for the creation of a works council.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Collaborate with (non-) governmental organizations to support workers.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Indicator 1.2.3: The biofuel operator that cooperates with out-growers provides evidence demonstrating that the work of children on family fields does not have negative impact on the development of children.

<table>
<thead>
<tr>
<th>Verifiers (require compliance by the biofuel operator)</th>
<th>Evaluation guide (guideline for the assessor of biofuel projects)</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Insure that the work of children on family fields does not interfere with their educational, social, or physical development.</td>
<td>During the monitoring visits verify if the work on family fields does not interfere with the educational, social or physical development of children (this can be verified by interviewing the children, teachers, local health providers).</td>
<td>– Biofuel feedstock producers.</td>
</tr>
</tbody>
</table>
2. Insure that the workday of children, including transport to school, the lessons and the work on the family fields shall not exceed 10 hours. During the monitoring visits verify that the workday of children, including transport to school, the lessons and the work on the family fields does not exceed 10 hours (this can be verified by interviewing the children, teachers, local providers of health).

### Indicator 1.2.4: The biofuel operator provides evidence demonstrating only to employ minors of at least 15 years of age.

<table>
<thead>
<tr>
<th>Verifiers (require compliance by the biofuel operator)</th>
<th>Evaluation guide (guideline for the assessor of biofuel projects)</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Be in possession of a written authorization from the legal representative of the minor between 15 and 18 years.</td>
<td>During the monitoring visits verify the written consent of the minor’s legal representative, evaluate the list containing the appropriate tasks and work for minors, and interview the minor to ensure that this list is respected.</td>
<td>– Biofuel feedstock producers; – Biofuel feedstock processors; – Biofuel feedstock exporters; – Biofuel producers; – Biofuel exporters; – Biofuel wholesalers.</td>
</tr>
<tr>
<td>2. Provide minors between 15 and 18 years with appropriate tasks and work.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Elaborate a list containing the appropriate tasks and work for minors between 15 and 18.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. The normal working hours of minors between 15 and 18 shall not exceed 38 hours per week and 7 hours per day.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Indicator 1.2.5: The biofuel operator provides evidence demonstrating not to subject workers to any form of discrimination.

<table>
<thead>
<tr>
<th>Verifiers (require compliance by the biofuel operator)</th>
<th>Evaluation guide (guideline for the assessor of biofuel projects)</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not to discriminate workers, by:</td>
<td>During the monitoring visits verify whether discrimination occurs at the workplace. In case of complaints, investigate whether these are justified (this can be verified by interviewing workers and the biofuel operator).</td>
<td>– Biofuel feedstock producers; – Biofuel feedstock processors; – Biofuel feedstock exporters; – Biofuel producers; – Biofuel exporters; – Biofuel wholesalers; – Biofuel distributers.</td>
</tr>
<tr>
<td>1. Ethnic origin;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Language;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Race;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Sex;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Marital status;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Age (within limits set by law);</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Social status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Religion;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Political opinions;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Affiliation or not with works council/trade unions;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ANNEX II

Indicator 2.1.1: The biofuel operator provides evidence that the meetings of the community consultation were based on free, prior, and informed consent, through a consensus-driven and well-documented process.

<table>
<thead>
<tr>
<th>Verifiers (require compliance by the biofuel operator)</th>
<th>Evaluation guide (guideline for the assessor of biofuel projects)</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elaborate a report of the community consultation process, containing: 1. Minutes of all meetings of the community consultation, including at least: the date, name of the community, place, the number of community members present, a description of the discussion, dates of future meetings if necessary, signature of 3 to 9 community representatives;</td>
<td>Verify that the minutes of all meetings are complete and correct.</td>
<td>- Biofuel feedstock producers; - Biofuel feedstock processors; - Biofuel producers; - Biofuel wholesalers.</td>
</tr>
<tr>
<td>2. Number of persons directly affected by the project;</td>
<td>Verify whether all persons directly affected by the projected have been consulted.</td>
<td></td>
</tr>
<tr>
<td>3. Community members are informed at least 5 working days before the meetings, with a clear explanation of the objectives of the meeting;</td>
<td>Verify if efforts were made on time to ensure the participation of community members.</td>
<td></td>
</tr>
<tr>
<td>4. Document methods used to achieve the intended propose;</td>
<td>Verify whether the methods used to achieve the intended propose were adequate.</td>
<td></td>
</tr>
<tr>
<td>5. Indication of how and when relevant information for stakeholder engagement and involvement in decision-making was provided and made accessible;</td>
<td>Verify whether the information provided was relevant to the community and how and when this information was provided and made accessible.</td>
<td></td>
</tr>
<tr>
<td>6. If applicable, document the divergent views of individual members of the community, focus groups and other stakeholders;</td>
<td>Take into account the divergent views of individual members of the community, focus groups and other stakeholders.</td>
<td></td>
</tr>
<tr>
<td>7. Efforts made to conduct the meetings in a representative manner, focusing on gender equity and age;</td>
<td>Verify if the participants in the meetings formed a representative group, focusing on gender equality and age.</td>
<td></td>
</tr>
<tr>
<td>8. Participatory diagnosis with the community and directly affected neighbors;</td>
<td>Verify whether the participatory diagnosis has been carried out correctly.</td>
<td></td>
</tr>
<tr>
<td>9. If applicable, make and implement a resettlement plan for the community and family fields;</td>
<td>Evaluate the feasibility of the resettlement plan.</td>
<td></td>
</tr>
</tbody>
</table>
During the monitoring visits verify if the resettlement plan has been carried out.

| 10. Regularly update the community about the development of the project. | During the monitoring visits verify if the community is updated on project activities that directly affect its community members. |

**Indicator 2.2.1: The biofuel operator provides evidence demonstrating to contribute to the development of the community (and others stakeholders) affected by the project.**

<table>
<thead>
<tr>
<th>Verifiers</th>
<th>Evaluation guide</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>(require compliance by the biofuel operator)</td>
<td>(guideline for the assessor of biofuel projects)</td>
<td>– Biofuel feedstock producers; – Biofuel feedstock processors; – Biofuel producers; – Biofuel wholesalers.</td>
</tr>
<tr>
<td>1. Provide a list of existing (social) infrastructure in/near the area of implementation.</td>
<td>Compare existing and planned (social) infrastructure in/near the area of implementation, in order to determine what the development will be.</td>
<td></td>
</tr>
<tr>
<td>2. Negotiate and agree with the community on the short and long-term provisions for the community</td>
<td>Verify that the provisions agreed between the biofuel operator and the community reflect the needs of the community. During the monitoring visits check if the provisions agreed on have been implemented.</td>
<td></td>
</tr>
</tbody>
</table>

**Indicator 2.2.2: The biofuel operator provides evidence demonstrating that Mozambican citizens are given employment preference.**

<table>
<thead>
<tr>
<th>Verifiers</th>
<th>Evaluation guide</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>(require compliance by the biofuel operator)</td>
<td>(guideline for the assessor of biofuel projects)</td>
<td>– Biofuel feedstock producers; – Biofuel feedstock processors; – Biofuel producers; – Biofuel wholesalers; – Biofuel distributors.</td>
</tr>
<tr>
<td>1. Comply with the following quotas when employing foreign workers: i) maximum of 5% of all workers in companies employing over 100 workers, ii) maximum of 8% of all workers in companies employing 10 to 100 workers, iii) maximum of 10% of all workers for companies employing up to 10 workers. Substantiate if these quotas are not feasible.</td>
<td>Verify that quotas are not exceeded. If quotas are exceeded, verify the reason and if valid agree otherwise with the biofuel operator viable quotas.</td>
<td></td>
</tr>
<tr>
<td>2. Define and implement a training program for permanent national workers, including the number and level of workers to benefit from the program.</td>
<td>During the monitoring visits verify the presence of a fair division of tasks (national workers are not just carrying out low-skilled jobs), the definition and implementation of the training program, and the inclusion of low-skilled workers in the training program.</td>
<td></td>
</tr>
</tbody>
</table>

**Indicator 2.2.3: Where introduction of mechanization leads to a reduction in labor intensity, the biofuel operator formulates a social action plan in order to mitigate the direct effects on the affected stakeholders.**
The social action plan should include:
1. Reasons to mechanize;
2. Technology to be used and advantages and disadvantages;
3. Social impacts on directly affected stakeholders;
4. Viewpoint of the biofuel operator and the stakeholders directly affected.

Verifiers (require compliance by the biofuel operator) | Evaluation guide (guideline for the assessor of biofuel projects) | Who should comply
--- | --- | ---
Assess the social action plan. | During the monitoring visits verify if the social action plan has been formulated and implemented. | – Biofuel feedstock producers; – Biofuel feedstock processors; – Biofuel producers; – Biofuel wholesalers.

**Indicator 2.3.1:** The biofuel operator provides evidence demonstrating that biofuel operations minimize risks for public health.

Perform a public health risk assessment, including:
1. (Potential) impacts of biofuel operations on public health;
2. Measures, as well as the effectiveness of these to prevent and/or mitigate the (potential) negative impacts of biofuels operations on public health.
3. All technologies related to genetically modified organisms used in the biofuel operation that (potentially) pose a social, environmental or economic risk to the communities, other stakeholders, industries, society in general and the environment;
4. Impacts that the identified technologies (potentially) have on the communities, other stakeholders, industries, society in general and the environment;
5. Measures, as well as their effectiveness, to prevent and/or mitigate (potential) negative impacts of the identified technologies on the communities, other stakeholders, industries, society in general and the environment;
6. Social and environmental benefits brought by the technologies identified in comparison with alternatives.

Verifiers (require compliance by the biofuel operator) | Evaluation guide (guideline for the assessor of biofuel projects) | Who should comply
--- | --- | ---
Evaluate the public health risk assessment. | Evaluate the risk assessment for the use of genetically modified organisms. | – Biofuel feedstock producers.
During the monitoring visits verify whether the measures have been implemented. | During the monitoring visits verify whether the measures have been implemented. | – Biofuel feedstock processors;
– Biofuel producers;
– Biofuel wholesalers.
Indicator 2.3.2: The biofuel operator provides evidence demonstrating that biofuel operations comply with hygiene standards and safety rules in force (Labor Law: Law No. 23/2007).

<table>
<thead>
<tr>
<th>Verifiers (require compliance by the biofuel operator)</th>
<th>Evaluation guide (guideline for the assessor of biofuel projects)</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Formulate a list of relevant hygiene standards and safety rules at the workplace and an implementation plan.</td>
<td>Verify whether the list of relevant hygiene standards and safety rules is complete and evaluate the implementation plan of these. During the monitoring visits assess whether implementation of the hygiene standards and safety rules have been carried out. Also interview workers about safety and hygiene at the workplace and the occurrence of accidents and occupational diseases.</td>
<td>– Biofuel feedstock producers; – Biofuel feedstock processors; – Biofuel feedstock exporters; – Biofuel producers; – Biofuel exporters; – Biofuel wholesalers; – Biofuel distributors.</td>
</tr>
</tbody>
</table>

ANNEX III

Indicator 3.1.1: The biofuel operator willing to export biofuels provides evidence demonstrating compliance with the domestic needs.

<table>
<thead>
<tr>
<th>Verifiers (require compliance by the biofuel operator)</th>
<th>Evaluation guide (guideline for the assessor of biofuel projects)</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Till 2015 comply with E10 and B3; 2016-2020 comply with E15 and B7.5; from 2020 comply with E20 and B10.</td>
<td>Verify if the biofuel operator has contributed to achieve domestic needs.</td>
<td>– Biofuel producers; – Biofuel exporters.</td>
</tr>
<tr>
<td>2. Provide quarterly, and whenever requested, information about: the amount, characteristics and target market of the biofuels and their derivatives.</td>
<td>Verify whether the information is correct and complete and, in particular, if the biofuel operator has delivered biofuels exclusively to titleholders of a valid license for the production, storage, export, transport and commercialization of biofuels.</td>
<td>– Biofuel producers; – Biofuel exporters; – Biofuel wholesalers; – Biofuel distributors.</td>
</tr>
</tbody>
</table>

ANNEX IV

Indicator 4.1.1: The biofuel operator provides evidence demonstrating a business plan that reflects management commitment to long-term economic and financial viability of the biofuel operations.
<table>
<thead>
<tr>
<th>Verifiers</th>
<th>Evaluation guide</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>(require compliance by the biofuel operator)</td>
<td>(guideline for the assessor of biofuel projects)</td>
<td></td>
</tr>
<tr>
<td><strong>1. A 10-year production plan for agricultural activities, focusing on: area to be planted (ha/yr); yields per crop (ton/ha/yr); total production (ton/yr).</strong></td>
<td>Evaluate whether the 10-year production plan for agricultural activities is viable. Compare the data of the 10-year production plan for agricultural activities with existing initiatives and literature. During the monitoring visits compare the allocated provisional DUAT with the area planted to determine whether the production has been carried out in accordance with the business plan. Verify the agricultural administration on the plantation.</td>
<td>– Biofuel feedstock producers.</td>
</tr>
<tr>
<td><strong>2. A 10-year production plan for industrial activities, focusing on: the processing of the main feedstock (ton/yr); the total production per product l/yr).</strong></td>
<td>Evaluate whether the 10-year production plan for industrial activities is viable. Compare the data of the 10-year production plan for industrial activities with existing initiatives and literature. During the monitoring visits verify whether industrial activities were carried out in accordance with the business plan and verify the industrial administration at the facilities.</td>
<td>– Biofuel feedstock processors; – Biofuel producers.</td>
</tr>
<tr>
<td><strong>3. Total investment value in USD (foreign direct investment) or MZN (national direct investment), focusing on: agriculture activities; industrial activities; infrastructural improvements and good actions related to social development.</strong></td>
<td>Verify whether the investment values are viable. During the monitoring visits verify whether investments were carried out in accordance with the business plan. Verify the administration and annual reports.</td>
<td>– Biofuel feedstock producers; – Biofuel feedstock processors; – Biofuel feedstock exporters; – Biofuel producers; – Biofuel exporters; – Biofuel wholesalers.</td>
</tr>
<tr>
<td><strong>4. Original proofs of the funding sources in USD or MZN, focusing on: own capital (social capital and supplies); loans (contract between the biofuel operator and the financier); others.</strong></td>
<td>Evaluate the original proofs of the funding sources.</td>
<td></td>
</tr>
<tr>
<td><strong>5. A 10-year financial plan, focusing on: expected revenues; total costs including interests and depreciation; internal rate of return; net profits/losses; sensibility analysis.</strong></td>
<td>Evaluate whether the financial plan is complete and viable.</td>
<td></td>
</tr>
<tr>
<td><strong>6. Proves of having the capacity, and business and technical experience to execute the project.</strong></td>
<td>Evaluate whether the biofuel operator has the capacity, and business and technical experience to execute the project.</td>
<td></td>
</tr>
<tr>
<td><strong>7. The domestic, regional or international target market of the final agricultural/industrial products, and the expected prices in USD in these markets.</strong></td>
<td>Evaluate the information provided.</td>
<td></td>
</tr>
</tbody>
</table>
**ANNEX V**

**Indicator 5.1.1:** The biofuel operator provides evidence demonstrating to follow a plan that ensures local food security, maintaining the availability of and access to staple food, as compared to the situation before the operations.

<table>
<thead>
<tr>
<th>Verifiers</th>
<th>Evaluation guide</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>(require compliance</td>
<td>(guideline for the assessor</td>
<td>– Biofuel feedstock producers;</td>
</tr>
<tr>
<td>by the biofuel operator)</td>
<td>of biofuel projects)</td>
<td>– Biofuel feedstock processors;</td>
</tr>
<tr>
<td>1. Formulate a plan that</td>
<td></td>
<td>– Biofuel producers;</td>
</tr>
<tr>
<td>ensures local food</td>
<td>Verify whether the plan has been</td>
<td>– Biofuel wholesalers.</td>
</tr>
<tr>
<td>security, maintaining the</td>
<td>formulated and evaluate if the it</td>
<td></td>
</tr>
<tr>
<td>availability of and access</td>
<td>assures local food security.</td>
<td></td>
</tr>
<tr>
<td>to staple food, as</td>
<td>During the monitoring visits</td>
<td></td>
</tr>
<tr>
<td>compared to the situation</td>
<td>verify if the plan that was</td>
<td></td>
</tr>
<tr>
<td>before the operations.</td>
<td>formulated to ensure local food</td>
<td></td>
</tr>
<tr>
<td></td>
<td>security was carried out.</td>
<td></td>
</tr>
</tbody>
</table>

**ANNEX VI**

**Indicator 6.1.1:** The biofuel operator provides evidence demonstrating that residues, wastes and byproducts are recycled or processed.

<table>
<thead>
<tr>
<th>Verifiers</th>
<th>Evaluation guide</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>(require compliance</td>
<td>(guideline for the assessor</td>
<td>– Biofuel feedstock producers.</td>
</tr>
<tr>
<td>by the biofuel operator)</td>
<td>of biofuel projects)</td>
<td></td>
</tr>
<tr>
<td>1. Present measures about</td>
<td>Evaluate the measures about which</td>
<td></td>
</tr>
<tr>
<td>which and how agricultural</td>
<td>and how agricultural wastes and</td>
<td>– Biofuel feedstock processors;</td>
</tr>
<tr>
<td>wastes and byproducts are</td>
<td>byproducts are recycled/processed</td>
<td>– Biofuel producers.</td>
</tr>
<tr>
<td>recycled/processed and for</td>
<td>and for what purposes.</td>
<td></td>
</tr>
<tr>
<td>what purposes.</td>
<td>During the monitoring verify</td>
<td></td>
</tr>
<tr>
<td></td>
<td>whether the measures were</td>
<td></td>
</tr>
<tr>
<td></td>
<td>implemented and evaluate the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>administration of agricultural</td>
<td></td>
</tr>
<tr>
<td></td>
<td>activities in the plantations.</td>
<td></td>
</tr>
<tr>
<td>2. Present measures about</td>
<td>Evaluate the measures about which</td>
<td></td>
</tr>
<tr>
<td>which and how industrial</td>
<td>and how industrial waste and</td>
<td></td>
</tr>
<tr>
<td>wastes and byproducts are</td>
<td>byproducts are recycled/processed</td>
<td>– Biofuel feedstock processors;</td>
</tr>
<tr>
<td>recycled/processed and for</td>
<td>and for what purposes.</td>
<td>– Biofuel producers.</td>
</tr>
<tr>
<td>what purposes.</td>
<td>During the monitoring verify</td>
<td></td>
</tr>
<tr>
<td></td>
<td>whether the measures were</td>
<td></td>
</tr>
<tr>
<td></td>
<td>implemented and evaluate the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>administration of industrial</td>
<td></td>
</tr>
<tr>
<td></td>
<td>activities at the installations.</td>
<td></td>
</tr>
</tbody>
</table>
**Indicator 6.2.1:** The biofuel operator provides evidence demonstrating to follow a plan that facilitates technology transfer and knowledge sharing to increase the agricultural productivity of local smallholders.

<table>
<thead>
<tr>
<th>Verifiers (require compliance by the biofuel operator)</th>
<th>Evaluation guide (guideline for the assessor of biofuel projects)</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. During the community consultation, negotiate with the community and depending on the results, develop a plan that facilitates technology transfer and knowledge sharing to increase agricultural productivity of local smallholders.</td>
<td>Verify if a plan was formulated and assess whether it facilitates technology transfer and knowledge sharing to increase agricultural productivity of local smallholders. During the monitoring visits, verify if the plan that was formulated to facilitate technology transfer and knowledge sharing to increase agricultural productivity of local producers was implemented.</td>
<td>– Biofuel feedstock producers; – Biofuel feedstock processors; – Biofuel producers; – Biofuel wholesalers.</td>
</tr>
</tbody>
</table>

**ANNEX VII**

**Indicator 7.1.1:** The biofuel operator provides evidence demonstrating the reduction of GHG emissions as compared to fossil fuels in his/her biofuel operation(s).

<table>
<thead>
<tr>
<th>Verifiers (require compliance by the biofuel operator)</th>
<th>Evaluation guide (guideline for the assessor of biofuel projects)</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Use an internationally recognized method to calculate the reduction of GHG emissions.</td>
<td>Verify if the method used for calculating the reduction of GHG emissions is internationally recognized. During the monitoring visits assess whether the calculations provided for the reduction of GHG emissions are correct and if a reduction occurred.</td>
<td>– Biofuel feedstock producers; – Biofuel feedstock processors; – Biofuel producers.</td>
</tr>
</tbody>
</table>

**Indicator 7.2.1:** The biofuel operator provides evidence demonstrating to have carried out an environmental impact assessment (EIA).

<table>
<thead>
<tr>
<th>Verifiers (require compliance by the biofuel operator)</th>
<th>Evaluation guide (guideline for the assessor of biofuel projects)</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. “Projects of A-category”: describe the activity, justify the activity, present the legal guideline relevant for the EIA,</td>
<td>Categorize the biofuels projects as “A, B or C” with the prerequisites stipulated in the EIA Regulation.</td>
<td>– Biofuel feedstock producers; – Biofuel feedstock processors;</td>
</tr>
<tr>
<td>Activity</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>Present a brief biophysical and economic description of the area, present the current land use in the area of activity, present information about the environmental state in the area of activity, present the information about the steps that are required to realize the EIA, fill in the preliminary environmental information sheet, conduct an environmental pre-feasibility study; elaborate the terms of reference for the environmental impact study, organize a public consultation, perform a environmental impact study.</td>
<td>During the monitoring visits verify whether the elaborated environmental plans were carried out.</td>
<td>- Biofuel producers with an annual production above 12,000,000 liters.</td>
</tr>
</tbody>
</table>

2. "Projects of B-category": describe the activity, justify the activity, present the legal guideline relevant for the EIA, present a brief biophysical and economic description of the area, present the current land use in the area of activity, present information about the environmental state in the area of activity, present the information about the steps that are required to realize the EIA, fill in the preliminary environmental information sheet, conduct an environmental pre-feasibility study; elaborate the terms of reference for the simplified environmental study, organize a public consultation, perform simplified environmental study. | - Biofuel feedstock processors; - Biofuel producers with an annual production equal to or less than 12,000,000 liters. |

3. "Projects of C-category": are subjected to compliance with the rules stipulated in specific directives of good environmental management. | - Biofuel feedstock processors; - Biofuel wholesalers. |
**Indicator 7.3.1:** The biofuel operator provides evidence demonstrating that when using environmental resources, he/she takes into account biodiversity, ecosystems and conservation values existing on the land.

<table>
<thead>
<tr>
<th>Verifiers (require compliance by the biofuel operator)</th>
<th>Evaluation guide (guideline for the assessor who evaluates biofuel projects)</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify the vegetation in the affected area and the biogeoclimatic zoning.</td>
<td>Evaluate the information provided.</td>
<td>– Biofuel feedstock producers;</td>
</tr>
<tr>
<td>2. Present the maturity stage of the vegetation.</td>
<td></td>
<td>– Biofuel feedstock processors;</td>
</tr>
<tr>
<td>3. In case applicable, present the degradation factors of the area.</td>
<td></td>
<td>– Biofuel producers.</td>
</tr>
<tr>
<td>4. Identify the abundance and distribution of animal species in the area of project implementation.</td>
<td>Verify that the area of project implementation is not a (native) forest or other areas with (high) conservation value.</td>
<td></td>
</tr>
<tr>
<td>5. Identify community species of animals and plants of special importance in ecological terms and in relation to Man.</td>
<td>Verify whether the information is correct.</td>
<td></td>
</tr>
<tr>
<td>6. Identify sensitive areas or ecosystems that may be interrupted with the implementation of the project.</td>
<td>During the monitoring visits verify whether the specific management practices were implemented.</td>
<td></td>
</tr>
<tr>
<td>7. Prioritize areas with the lowest possible risk of impacts on conservation values.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Present the impacts of the project on natural and humanized ecosystem. If the impacts are negative, present the mitigation measures.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicator 7.4.1:** The biofuel operator provides evidence demonstrating to minimize negative impacts on soil quality.

<table>
<thead>
<tr>
<th>Verifiers (require compliance by the biofuel operator)</th>
<th>Evaluation guide (guideline for the assessor of biofuel projects)</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Minimize soil erosion in the area of project implementation through specific management practices.</td>
<td>Assess whether the specific management practices contribute to the minimization of soil erosion.</td>
<td>– Biofuel feedstock producers.</td>
</tr>
<tr>
<td></td>
<td>During the monitoring verify whether the specific management practices were implemented.</td>
<td></td>
</tr>
<tr>
<td>2. Present the nutrient application plan based on official</td>
<td>Evaluate the nutrient application plan by comparing it to official fertilizer</td>
<td></td>
</tr>
</tbody>
</table>
recommendations for the specific crop, including organic and artificial fertilizers needed to reach the desired yield.

3. Present a list of agro-chemicals to be used for crop protection including the active agent and frequency of application as well as the impacts on soil and mitigation measures if these impacts are negative.

4. Present the impacts of air pollutants, effluents and wastes on the soil in the area of project implementation, and mitigation measures if these impacts are negative.

Indicator 7.4.2: The biofuel operator provides evidence demonstrating to minimize negative impacts on air quality.

<table>
<thead>
<tr>
<th>Verifiers</th>
<th>Evaluation guide</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify air pollutants emitted during construction and operation of the project (carbon monoxide, nitrogen oxides, volatile organic compounds, particulates, sulfur compounds, dioxins and other substances known to be potentially dangerous for the environment and/or human health).</td>
<td>Verify whether the information provided is correct and does not exceed the parameters stipulated in the legislation.</td>
<td>– Biofuel feedstock producers; – Biofuel feedstock processors; – Biofuel producers.</td>
</tr>
<tr>
<td>2. Present the impacts on air quality resulting from the emission of pollutants by the construction and operation of the project and mitigation measures.</td>
<td>Verify whether information provided is correct and according to the parameters stipulated in the legislation.</td>
<td>– Biofuel feedstock producers; – Biofuel feedstock processors; – Biofuel producers.</td>
</tr>
</tbody>
</table>

Indicator 7.5.1: The biofuel operator provides evidence demonstrating to minimize negative impacts on the availability and quality of water.

<table>
<thead>
<tr>
<th>Verifiers</th>
<th>Evaluation guide</th>
<th>Who should comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Present the annual water needs (liters).</td>
<td>Verify whether the information provided is correct.</td>
<td>– Biofuel feedstock producers; – Biofuel feedstock processors; – Biofuel producers.</td>
</tr>
<tr>
<td>2. Obtain a license or concession for the use and benefit of water if the volume determined by the regulator is exceeded.</td>
<td>Evaluate compliance with the prerequisites stipulated in the legislation.</td>
<td>– Biofuel feedstock producers; – Biofuel feedstock processors; – Biofuel producers.</td>
</tr>
<tr>
<td>3. Describe and characterize the main water bodies that may be contaminated.</td>
<td>Verify whether the information provided is correct.</td>
<td>– Biofuel feedstock producers; – Biofuel feedstock processors; – Biofuel producers.</td>
</tr>
</tbody>
</table>
4. Identify other users of these water bodies and respect their legitimate rights.  
Check for other legitimate users of these water bodies.  
During the monitoring verify whether access to these water bodies was denied to legitimate users.

5. Present the physio-chemical and biological parameters of the water bodies to be affected by the project.  
Verify whether the information provided is correct.

6. Present the impacts of the project on the physio-chemical and biological water bodies and mitigation measures when the impacts are negative.  
Verify whether the information provided is correct.  
During the monitoring visits verify whether the mitigation measures were implemented.

7. Present historical records about the use of the water bodies to be used during the implementation of the project.  
Verify whether the information provided is correct.

8. Present evolutionary tendencies and seasonal/annual changes of the water bodies to be used during the implementation of the project.  

9. When using an irrigation system present the technology to be used.  
Verify whether the technology being used is appropriate.  
– Biofuel feedstock producers.

10. When using an irrigation system, present measures to reduce water losses, including evaporation, infiltration and leakage.  
Check whether measures to reduce water losses, including evaporation, infiltration and leakage are appropriate.  
During the monitoring visits verify whether the measures were implemented.

11. When using an irrigation system, present the most suitable regime for soil moisture.  
Verify whether regime for soil moisture is the most suitable.  
During the monitoring to check whether the regime was implemented.

12. Present information about the location, flow rates and characterization of the effluent discharge receptor and existing use before the project.  
Verify whether the information provided is correct.  
– Biofuel feedstock producers;  
– Biofuel feedstock processors;  
– Biofuel producers.

13. Present net emissions of effluents generated by the project, its collection, treatment, destiny and the impact on water quality in the receiving environment.  
Verify whether the information provided is correct.  
During the monitoring visits verify whether the mitigation measures were implemented.
This is a publication of:

NL Agency
NL Energy and Climate Change
Croeselaan 15
Postbus 8242 | 3503 RE Utrecht
The Netherlands
T +31 (0) 88 602 24 58
www.agentschapnl.nl/biomass

© NL Agency

No rights may be derived from this brochure, or from any of the examples
tained herein, nor may NL Agency be held liable for the consequences
rising from the use thereof.

NL Agency is an agency of the Dutch ministry of Economic Affairs
responsible for the implementation of sustainability, innovation
and economic development programmes for various
governmental bodies. NL Agency is a department of the Dutch
Ministry of Economic Affairs that implements government policy
for sustainability, innovation, and international business and
coopertation. It is the contact point for businesses, educational
institutions and government bodies for information and advice,
financing, networking and regulatory matters.