

Bioenergy Policy Validation Workshop for ICAT Eswatini Phase 2

Initiative for Climate Action Transparency - ICAT Bioenergy Policy Validation Workshop

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Abbreviations

CSER	Centre for Sustainable Energy Research
CCU	Climate Change Unit
CSO	Central Statistics Office
ECGA	Eswatini Cane Growers Association
EEA	Eswatini Environmental Authority
EEC	Eswatini Electricity Company
ESA	Eswatini Sugar Association
ESERA	Eswatini Energy Regulatory Authority
EWSC	Eswatini Water Services Corporation
GHGMI	Greenhouse Gas Management Institute
GoE	Government of Eswatini
ICAT	Initiative for Climate Action Transparency
MCIT	Ministry of Commerce Industry and Trade
MoA	Ministry of Agriculture
MoF	Ministry of Finance
MNRE	Ministry of Natural Resources and Energy
MTEA	Ministry of Tourism and Environmental Affairs
NDC	Nationally Determined Contributions
PPCU	Policy and Programme Coordination Unit
RES	Royal Eswatini Sugar
UNESWA	University of Eswatini
UNFCCC	United Nations Framework Convention on Climate Change
UNOPS	United Nations Office for Project Services

1. Introduction

The Kingdom of Eswatini relies heavily on imports to meet its energy demand, with all petroleum products and more than half of the electricity consumed being imported. The country has no oil reserves, limiting its ability to reduce imports of petroleum products. Despite this, Eswatini possesses both conventional and renewable energy resources that can enhance electricity generation and improve the security of its electricity supply.

Biomass residues from the sugar sector (primarily bagasse) and the timber sector (residues and wood chips) are renewable energy resources with a significant potential to contribute towards meeting Eswatini's electricity demand. Additionally, producing bioethanol from sugar processing for blending with petrol can reduce the quantity of imported petrol, and contribute to the reduction of greenhouse gas emissions.

Appropriate bioenergy policies can unlock Eswatini's potential for biomass electricity generation, biofuel production, and efficient use of wood fuel in households. By harnessing sustainably grown biomass residues for electricity generation, Eswatini can decrease its reliance on imported electricity, thus enhancing energy security and mitigating price fluctuations associated with imported energy. Biomass electricity plants can provide a stable and clean energy source, contributing to the country's developmental and environmental goals. Increased local electricity generation will enhance and diversify local economic development and growth by reducing expenditure on imported electricity while utilizing locally grown biomass residues. Additionally, the involvement of numerous smallholder farmers in the biomass production chain can result in significant socio-economic impacts and promote rural development.

Furthermore, Eswatini's proposed Bioenergy Policy should promote the development of liquid biofuels as a sustainable alternative to traditional transportation fossil fuels. Notably, Eswatini already produces considerable quantities of bioethanol, primarily for export, with none currently used locally. The policy proposes expanding bioethanol production specifically for the Eswatini market, leveraging existing capacity rather than starting from scratch. This will reduce greenhouse gas emissions, increase domestic energy production, create more jobs, reduce imports, and boost the local economy.

The actions in the Bioenergy Policy are aimed at achieving the following objectives:

1. **Addressing Energy Security Concerns:** Eswatini imports a significant amount of its electricity (about 70% of national demand) and all its liquid fuels, making it vulnerable to price fluctuations and supply disruptions in the regional liquid fuels market. Biomass, as a domestic renewable resource, can help reduce this dependence and supply fluctuations, thereby enhancing Eswatini's energy security.
2. **Combating Climate Change:** If managed sustainably, biomass can offer a lower carbon footprint compared to traditional fossil fuels like coal. This aligns with Eswatini's commitments (under the NDC) to international climate agreements and its pursuit of a more sustainable energy future.
3. **Economic Development Opportunities:** Establishing a commercial biomass energy sector can create new jobs in areas such as cultivating, managing, harvesting and transporting biomass feedstocks, operating power plants, and developing related technologies. This can contribute to economic growth and diversification, particularly in rural areas.

The development of the Bioenergy Policy is the primary task of the Bioenergy Task Force (BTF), which has been in place since February 2024. The BTF is inclusive, with members from several key stakeholder institutions and groups. Inclusiveness requires engagement with key stakeholders. On 26 July 2024, key bioenergy stakeholders were invited to a stakeholder consultation workshop to discuss the draft National Bioenergy Policy being developed under the direction of the BTF supported by the ICAT Eswatini II project. The BTF considered the inputs of stakeholders to produce a final draft of the National Bioenergy Policy. Consequently, on 4 November 2024, a validation workshop for the policy was held at the Royal Villas Hotel, Ezulwini.

2. Workshop objectives and expected outcomes

The Bioenergy Validation Workshop aimed to bring together stakeholders to validate the National Bioenergy Policy draft and assess its alignment with national energy goals. The specific objectives were to:

1. Present and discuss policy positions developed by the Bioenergy Task Force.
2. Raise awareness among stakeholders about the bioenergy sector's potential.
3. Collect feedback to refine the policy's technical, financial, and environmental provisions.
4. Facilitate an understanding of the draft policy framework to ensure broad support and alignment with stakeholder interests.

Expected outcomes included:

1. A comprehensive review and validation of the draft Bioenergy Policy.
2. Valuable insights from stakeholders to refine policy positions and strategies.
3. Consensus on steps toward establishing an effective bioenergy framework.
4. Strengthened cooperation between government ministries, agencies, NGOs and private entities involved in the bioenergy sector.

3. Workshop format

The one-day workshop took place on November 4, 2024, at the Royal Villas Hotel in eZulwini, providing an opportunity for stakeholders to validate the draft Bioenergy Policy. Participants included representatives from the Ministry of Natural Resources and Energy (MNRE), Ministry of Tourism and Environmental Affairs (MTEA), Ministry of Finance, Montigny, USA distillers, the Centre for Sustainable Energy Research (CSER/UNESWA), Eswatini Energy Regulatory Authority (ESERA), Eswatini Sugar Association, and Eswatini Electricity Company among others.

The workshop format included policy presentations and moderated discussions. The morning session introduced the draft policy, followed by moderated discussions focused on specific challenges and policy statements. Each group presented its findings to the plenary for further dialogue. The meeting agenda is included in Annex 1.

4. Workshop participants

The workshop was attended by 31 representatives from various government ministries, departments, agencies, academia, NGOs, civil society, the private sector, and project partners. It is noted that of the 31 participants, 13 were female and 18 males.

5. Workshop Proceedings

5.1. Introductory session

The Bioenergy Stakeholder Workshop held on November 4, 2024, at the Royal Villas Hotel, began at 09:00 am with a prayer led by Mr Thembinkosi Ndzimandze. Following this, Ms Thabile Nkosi, Director of the Energy Department within the Ministry of Natural Resources and Energy (MNRE), delivered the opening remarks.

Ms Nkosi (Figure 1) emphasized the importance of achieving energy security as outlined in Eswatini's National Development Plan 2023–2028 and the National Energy Policy of 2018. She highlighted the urgency of expanding Eswatini's energy generation capacity, given that approximately 70% of the country's electricity is imported. She referenced the Short-Term Generation Expansion Plan, which prioritizes 40 MW of biomass power and 40 MW of Solar PV power, and noted that the government has committed to developing an additional 80 MW of biomass power. "Developing a robust bioenergy sector is essential for reducing our reliance on imported electricity and achieving energy security," she stated.

Ms Nkosi acknowledged the support by the Ministry of Tourism and Environmental Affairs (MTEA) and the Initiative for Climate Action Transparency (ICAT) in the ongoing effort to draft a comprehensive National

Bioenergy Policy. This policy aims to establish a framework for sustainable bioenergy production, focusing on electricity generation from biomass, biofuels for transport, and clean cooking technologies.

She expressed appreciation for the Bioenergy Task Force (BTF) for their hard work in drafting the policy positions that would form the basis for the day's discussions. Ms Nkosi also reaffirmed Eswatini's commitment to international agreements, including the Paris Agreement (UNFCCC) and the UN Sustainable Development Goals (SDGs), noting that the National Bioenergy Policy plays a significant role in achieving the country's Nationally Determined Contributions (NDCs) and supporting global climate change mitigation goals.

In addition, Ms. Nkosi highlighted the broader benefits of implementing a bioenergy policy, such as enhanced energy security, economic growth, job creation, and improved public health through the adoption of clean cooking technologies. She stressed the importance of sustainable practices, advocating for reforestation and sustainable forest management to protect Eswatini's natural forests and increase the country's carbon stock.



Figure 1: Director of the Department of Energy (MNRE), Ms Thabile Nkosi giving opening remarks.

Concluding her remarks, Ms Nkosi urged all stakeholders to actively participate in the discussions, share their insights, and work collaboratively to refine the draft bioenergy policy and thanked all participants for their dedication to this important exercise.

5.2. Introduction to Eswatini National Bioenergy Policy

Mr Thembinkosi Ndzimandze introduced the National Bioenergy Policy by presenting the foundational challenges within Eswatini's energy sector that the policy aims to address (Figure 2). He underscored the importance of energy security, sustainability, and environmental protection as key issues facing the country. To tackle these challenges, the National Bioenergy Policy addresses challenges in three main areas:

1. **Dependence on imports for electricity supply:** Eswatini's reliance on imported electricity poses a significant energy security risk. The policy provides a framework for leveraging biomass resources to generate electricity domestically, reducing vulnerability to external supply disruptions and improving energy stability.
2. **Transport fuel imports and emissions:** As Eswatini lacks internal petroleum resources, it relies entirely on imports for transport fuel. The policy proposes a solution through ethanol blending,

which would help to lower petrol import levels and reduce greenhouse gas emissions from the transport sector.

3. **High fuel wood consumption:** High reliance on fuel wood for cooking and heating exerts pressure on Eswatini's natural forests. The policy seeks to address this by promoting efficient biomass cook stoves and alternative clean cooking technologies, which will help to conserve forest resources and improve indoor air quality.

Mr Ndzimandze then highlighted the National Bioenergy Policy's core objectives, which are aimed at fostering a sustainable and resilient bioenergy sector in Eswatini:

1. **Enhancing energy security:** Developing local bioenergy resources for electricity generation and biofuel production to strengthen Eswatini's energy independence.
2. **Promoting affordable and sustainable energy access:** Ensuring that bioenergy options are accessible, affordable, and sustainable for all citizens.
3. **Encouraging clean cooking technologies:** Facilitating the widespread adoption of efficient biomass stoves and clean cooking solutions to reduce reliance on traditional fuel wood.
4. **Mitigating climate change:** Utilizing bioenergy as a lower-emission alternative, supporting Eswatini's commitments to national and international climate targets.
5. **Attracting bioenergy investment:** Providing clear, valuable information to potential investors on bioenergy development and investment opportunities in Eswatini.

He also emphasized the anticipated sustainable development impacts of the National Bioenergy Policy, especially its potential to reduce greenhouse gas emissions across electricity, transport, and household energy use. The policy is expected to contribute to economic growth at various levels, with job creation in bioenergy industries and positive effects on local communities. In particular, the promotion of clean cooking technologies will have direct health benefits for vulnerable populations, improving quality of life and environmental health.

Concluding his remarks, Mr Ndzimandze affirmed that the National Bioenergy Policy will establish a supportive environment for sustainable energy practices, positioning Eswatini to transition into a resilient, low-carbon economy.



Figure 2: Mr Thembinkosi Ndzimandze (MNRE) providing the summary of work on the Bioenergy policy.

5.3. Summary of the National Bioenergy Policy and Actions

Dr Nosiphiwo Zwane (Figure 3) presented an overview of the National Bioenergy Policy's key policy positions and strategic actions, aimed at enhancing Eswatini's energy security, promoting environmental sustainability, and encouraging investment in bioenergy. The policy outlines several strategic priorities:

1. **Security of feedstock supply**



- **Goal:** Ensure a stable, diverse supply of feedstock for bioenergy.
 - **Actions:** Promote various feedstock sources (agricultural residues, organic waste), support sustainable farming practices, and monitor biomass supply chain practices.
2. **Efficient biomass power production**
- **Goal:** Maximize output and minimize waste in biomass power generation.
 - **Actions:** Establish efficiency standards for biomass power plants and set dispatch guidelines for biomass power plants that allow them to contribute to base load.
3. **Sustainable biofuel production**
- **Goal:** Advance environmentally friendly biofuel production.
 - **Actions:** Encourage advanced technologies, mandate fuel blending, and establish quality standards for biofuels.
4. **Environmental protections**
- **Goal:** Minimize pollution from biomass and biofuel production.
 - **Actions:** Implement emission standards and promote pollution control technologies to protect air and water quality.
5. **Social impact safeguards**
- **Goal:** Address potential social impacts of bioenergy supply chains.
 - **Actions:** Develop regulations to mitigate land-use changes and enhance community well-being.
6. **Investment Incentives**
- **Goal:** Make bioenergy investment attractive and cost-effective.
 - **Actions:** Adjust taxes, deductions, and incentives for bioenergy investments.
7. **Efficient household cooking**
- **Goal:** Reduce household biomass consumption with clean cook stoves.
 - **Actions:** Develop funding mechanisms for high-efficiency stoves, and offer training on stove use and maintenance.
8. **Clean cooking alternatives**
- **Goal:** Increase access to cleaner cooking fuels and electricity.
 - **Actions:** Expand rural electrification, promote LPG, and explore biogas for cooking.
9. **Sustainable forestry**
- **Goal:** Protect forests and ensure long-term biomass availability.
 - **Actions:** Enforce forest protection laws, support community-based management, and promote reforestation.
10. **Capacity building**
- **Goal:** Develop expertise in biomass and biofuel production.
 - **Actions:** Fund research, provide training for industry skills, and raise public awareness on bioenergy benefits.
11. **Public health and environmental awareness**
- **Goal:** Educate the public on bioenergy's health and environmental impacts.
 - **Actions:** Conduct awareness campaigns on cleaner cooking alternatives.
12. **Technology innovation**

- **Goal:** Improve cook stove technology for cleaner energy use.
- **Actions:** Support R&D for advanced, efficient biomass stoves.

13. Equity and inclusion

- **Goal:** Promote fair access and participation in the bioenergy sector.
- **Actions:** Ensure equitable opportunities for women, youth, and vulnerable groups, and invest in their skills development.



Figure 3: Dr Nosiphiwo Zwane (CSER) making her presentation on the summary of work on the Bioenergy policy.

Following Dr Zwane's presentation, several questions were raised by participants:

- **Question on biofuels (Policy Position 3):** One participant asked why biodiesels were not explicitly included. The CSER-UNESWA team explained that while biodiesels were not specified, the policy position was intentionally broad, allowing for the future inclusion of biodiesels.
- **Question on expertise in policy position 10:** Another participant inquired why lawyers and economists were not mentioned in the capacity-building objectives.
- **Question on seasonal biomass availability:** The representative from the Eswatini Sugar Association (ESA) questioned the handling of sugarcane during the off-season, noting that production pauses in summer due to rain. Dr Mavimbela from CSER responded that there was no intention to alter existing operations but rather to explore potential integration with woodchip feedstock. Additionally, bagasse could be stored as an alternative feedstock during the off-season.
- **Question on alternative biomass sources:** ESERA's representative asked about alternative biomass sources during the off-season, noting that woodchips are often exported. Dr Mavimbela acknowledged this concern, emphasizing the need for diversified feedstock sources to maintain consistency in biomass electricity supply.

These discussions highlighted key areas for consideration in further refining the National Bioenergy Policy, ensuring it remains adaptable to stakeholder needs and operational realities.

5.4. Moderated Discussion on policy actions.

The workshop included a structured session where participants were divided into three groups to discuss the draft policy positions and the implementation plan. Each group focused on specific areas: **Group 1** reviewed policies on electricity generation, **Group 2** addressed financial aspects of the policy, and **Group 3** examined policy positions related to cooking technologies. After their discussions, each group presented their insights and recommendations to the plenary.

Group 1: Electricity Generation Policies and Challenges

- **Promote sustainable practices:** The group recommended good harvesting techniques, water efficiency, and plant recovery to support a sustainable feedstock supply.
- **Optimize efficiency in bioenergy operations:** The group suggested enhancing efficiency in irrigation, land preparation, and transportation. They also recommended modifying the language in Policy Position 2 to "strengthen" existing dispatch frameworks, given that Eswatini's current power plant infrastructure already has a dispatch framework.
- **Expand incentives:** The group proposed that Policy Position 6 could be revised to include both fiscal and non-fiscal incentives for biomass energy investment.
- **Broaden inclusivity in capacity building:** The group was satisfied with Policy Position 10 but suggested expanding it to include "and other related parties" to encompass a wider range of stakeholders.



Figure 4: Ms Simphiwe Dlamini providing the submissions from Group 1.

Group 2: Financial Aspects of the Policy

- **Integrate food security:** The group advised including "food security" considerations in Policy Position 1, emphasizing the need to allocate natural resources, like water, to support agricultural production alongside bioenergy.
- **Expand biofuel options:** The group proposed adding biodiesels and other renewable fuels to Policy Position 3 to ensure a broader array of sustainable fuel options.



Figure 5: Dr Nosiphiwo Zwane (CSER) providing the submissions from Group 2.

Group 3: Policies on Cooking and Household Energy

- **Refine targeting of vulnerable groups:** The group suggested removing “headed” from mentions of women- and child-headed households and using the UN definition for “vulnerable groups.” They also recommended supporting schools with funding for clean cookstoves and exploring brick-constructed stoves as a durable cooking alternative.
- **Revise policy language for clarity:** The group suggested rewording Policy Position 8 by removing “headed” to align with the UN definition, and removing “communal biodigesters” due to potential management challenges.
- **Streamline redundant language:** The group advised removing sub-position (b) in Policy Position 9, as sustainable harvesting is already addressed in the Nationally Determined Contributions (NDC).
- **Promote youth inclusivity:** To ensure the policy is inclusive of all ages, they recommended adding “boys and girls” alongside “men and women” in Policy Position 11.
- **Clarify the scope of bioenergy technology development:** For Policy Position 12, the group proposed ending the statement at “biomass conversion technologies” to avoid limiting the scope to “domestic use.”
- **Enhance gender inclusivity:** Although Policy Position 13 wasn’t discussed by the group, a stakeholder suggested adding “men” to the language for greater inclusivity.



Figure 6: Dr Gcina Mavimbela (CSER) providing the submissions from Group 3.

Additional Comments from the Plenary

Following the group presentations, the floor was opened for additional questions and comments from participants:

- **Food security concerns:** The Eswatini Cane Growers Association (ECGA) representative emphasized the need to prioritize food security by avoiding the use of food crops as bioenergy feedstock and ensuring there is agricultural land reserved for food production. Dr Mavimbela from CSER noted that while the initial policy draft included strict regulations to address this concern, these were later removed to avoid excessive regulatory restrictions. Mr Mike Bess suggested looking to Kenya as a model, where farmers have the option to engage in commercial agriculture if they choose.



Figure 7: Dr Siphon Nkambule (ECGA) making his remarks.

- **Feedstock flexibility:** The Director of Energy advised against restricting farmers to specific types of feedstocks and requested feedback from the Ministry of Agriculture regarding how food security regulations might impact this flexibility. The Agriculture representative confirmed that existing frameworks prevent spontaneous land-use changes, thereby safeguarding land for food security. The Director of Energy proposed including this as an action item for Agriculture in the implementation plan.
- **Protocol for feedstock harvesting:** Ms Rita Sikhondze recommended developing a feedstock protocol to define which plants can be sustainably harvested for bioenergy purposes.
- **Alternative biomass and sustainable practices:** Another participant suggested exploring bamboo as a potential feedstock and supported sustainable agricultural practices, such as crop rotation and mixed planting. They also recommended reviving traditional cooking techniques, like pit baking, as sustainable alternatives to wood fuel.
- **Clarifying feedstock definitions:** It was generally suggested to avoid specific terms like "first and second generation" feedstock in the policy. Using broader definitions would allow greater flexibility in identifying permissible feedstock types, minimizing confusion over which crops can be cultivated and where.
- **Data on feedstock from Food Balance Sheet:** One participant inquired whether food balance sheets could track potential bioenergy feedstock. Following this discussion, it was agreed that the policy should include a clear and broad definition of feedstock. References to "first and second-generation" feedstock would be removed to allow for more adaptable categorization.



Figure 8: Ms Lungile Ginindza making her submission.

5.5. Summary of Implementation Framework

Dr Mavimbela led the presentation on the **Implementation Plan** and the **Monitoring and Evaluation (M&E) Framework** for the Bioenergy Policy. This framework outlines specific actions, timelines, and designated responsibilities, aiming to ensure effective policy execution and accountability. He emphasized that:

- **Action items and timeframes:** The implementation plan delineates clear action items and designated responsible parties, along with projected timeframes to track progress. Stakeholders were encouraged to review these timelines to confirm feasibility and alignment with their organizational capacities.
- **Budget considerations:** Dr Mavimbela noted that the budget section of the plan still requires input, particularly on cost allocations. He invited stakeholders to collaborate in refining this part of the plan.
- **Monitoring metrics:** The M&E plan incorporates indicators to measure the policy's effectiveness in achieving its objectives, primarily to increase biomass-based energy generation and reduce greenhouse gas emissions. These indicators align with national and international climate goals, including:
 - **Biomass electricity generated:** Number of electricity units generated via biomass.
 - **Biofuels blending:** Volume of ethanol used for blending with petrol to mitigate transport sector greenhouse gas (GHG) emissions.
 - **Efficient cook stoves:** Number of households adopting high-efficiency cook stoves, with data collection supported by Central Statistics Office (CSO) surveys.
 - **LPG adoption:** Number of households transitioning to LPG for cooking, helping reduce emissions compared to traditional wood fuels.
 - **Biogas digesters:** Adoption rate of biogas digesters, especially for schools, with potential collaboration with the Eswatini Water Services Corporation (EWSC) on biogas from treatment plants.

Stakeholders were asked to provide further feedback on the implementation plan and M&E framework, with particular attention to refining indicators and budgeting.



Figure 9: Dr Gcina Mavimbela (CSER) giving the presentation on the Implementation Framework.

Moderated Discussion on the Implementation Framework

Following Dr Mavimbela's presentation, stakeholders engaged in a moderated discussion to address specific concerns and suggestions regarding the implementation and monitoring of the Bioenergy Policy:

- **Feedstock and Energy Balances:** A participant raised a question about feedstock sufficiency and the potential for competition with international markets, especially within the timber sector. Dr Mavimbela acknowledged this, noting that MNRE will introduce biomass registers as part of the policy implementation to improve feedstock tracking and align with national energy balance needs.
- **Domestic feedstock quotas:** Another participant suggested establishing a quota system where feedstock is prioritized for domestic use before being exported. Dr Mavimbela commented that exporting feedstock is costly, and domestic sales could offset some of these costs. He added that government quotas might be desirable, though WTO rules limit policy-driven market restrictions, and recommended consulting the Ministry of Commerce, Industry, and Trade (MCIT) for legal guidance.
- **Upgrading sugar industry infrastructure:** Dr Mavimbela highlighted that Eswatini's sugar industry infrastructure is outdated, originally built to use coal. Modernizing these systems to better utilize biomass may be costly but could improve efficiency and sustainability.
- **Leveraging Food Balance Sheets:** Dr Zwane proposed that Policy Position 1 in the implementation plan should acknowledge the role of food balance sheets in tracking non-food crops and bioenergy feedstock. The consultants will work to refine this area, coordinating with the Ministry of Agriculture (MoA) for clarification on who oversees food balance sheets.
- **Clarification on lead entities:** There was a question regarding which agency leads food balance sheet tracking for feedstock inventory purposes. It was noted that the Ministry of Agriculture (MoA) is likely responsible, but this will be confirmed after the workshop.

Dr Mavimbela encouraged stakeholders to continue reviewing the implementation and monitoring plans and submit any feedback within two weeks, with a final deadline set for Friday, November 15, 2024.

This moderated discussion underscored the importance of cross-sector collaboration, stakeholder input, and balanced regulatory frameworks to achieve the policy's objectives and address practical implementation challenges.

5.6 Closing Remarks from the Director of the Energy Department

The Director of the Energy Department (Figure 9) concluded the workshop by expressing her gratitude to the consultants for their dedication and engagement throughout the policy development process, from initial consultations to the current workshop. She noted the valuable contributions made by stakeholders and looks forward to receiving further comments to enhance the policy's effectiveness.



Figure 9: Director of Energy department, Ms Thabile Nkosi (MNRE) giving her closing remarks.

The Director also informed participants that the finalized document will be presented to the relevant authorities for formal approval, marking an essential step towards implementing the National Bioenergy Policy. She extended her appreciation to the consultants for their commitment to maintaining the project's timelines, ensuring that this critical work remains on track.

ANNEX 1: BIOENERGY STAKEHOLDER WORKSHOP AGENDA

Time	Activity	Responsibility
08:30 – 09:00	Arrival and Registration	All Participants
09:00 – 09:10	Introductions	All Participants
09:10 – 09:20	Welcome Remarks	Director of Meteorology
09:20 – 09:30	Remarks on Bioenergy	Director of Energy
09:30 -- 09:45	Introducing the Workshop and its objectives	BTF Chair
09:45 – 10:45	Summary of Policy and Actions	UNESWA
10:45 – 11:00	Tea Break	All Participants
11:00 – 12:00	Moderated Discussion on policy actions	All
12:00 – 13:00	Summary of Implementation Framework	UNESWA
13:00 – 14:00	Lunch Break	All Participants
14:00 – 15:00	Moderated discussion on the implementation framework	All
15:00 – 15:30	Policy MRV arrangements	UNESWA
15:30 – 15:45	Tea Break	All Participants
15:45 – 16:00	Closing Remarks	MTEA/MNRE