

Workshop Programme

Day 1: BASIC CONCEPTS IN ENERGY STATISTICS	
9.00am - 9.30am	1. Opening and introductions (<i>MNRE, IRENA</i>)
9.30am - 10.00am	2. Why collect renewable energy statistics? (<i>IRENA</i>) <ul style="list-style-type: none"> i. Main uses of energy statistics. ii. International commitments (Energy SDG, Targets and Indicators).
10.00am - 10.30am	3. Overview of renewable energy (<i>IRENA</i>) <ul style="list-style-type: none"> i. What is renewable energy? ii. Renewable energy sources. iii. Key renewable energy technologies.
10.30am - 11.00am	Coffee break
11.00am - 12.00pm	iv. Exercise: overview of renewable energy
12.00pm - 1.00pm	4. Introduction to energy statistics (<i>IRENA</i>) <ul style="list-style-type: none"> i. Different types of energy, energy producers and consumers. ii. Energy production, trade and capacity. iii. Elements of an energy balance. iv. Exercise – constructing an energy balance.
1.00pm - 2.00pm	Lunch
2.00pm - 3.00pm	v. Report back on the exercise, questions and answers
3.00pm - 3.30pm	Coffee break
3.30pm – 5.00pm	5. Renewable energy in selected countries (<i>participants</i>) <ul style="list-style-type: none"> i. Short presentations from two participants about the collection of renewable energy data in their countries.

Day 2: DATA COLLECTION, VALIDATION AND PRESENTATION	
9.00am - 9.30am	<p>6. Assessment of data needs and capacity (IRENA)</p> <ul style="list-style-type: none"> i. Barriers to data collection. ii. Assessment of existing data. iii. Framework for data collection. iv. Data collection, validation and dissemination.
9.30am - 10.30am	<p>7. Renewable energy in selected countries (participants)</p> <ul style="list-style-type: none"> i. Short presentations from two participants about the collection of renewable energy data in their countries.
10.30am - 11.00am	Coffee break
11.00am - 12.00am	<p>8. Collection of data from households and enterprises (IRENA)</p> <ul style="list-style-type: none"> i. Sampling strategy. ii. Administrative data. iii. Using surveys to collect renewable energy data.
12.00am - 1.00pm	9. Collection of wood energy data (IRENA)
1.00pm - 2.00pm	Lunch
2.00pm - 3.00pm	<p>10. Renewable energy in selected countries (participants)</p> <ul style="list-style-type: none"> i. Short presentations from two participants about the collection of renewable energy data in their countries.
3.00pm - 3.30pm	Coffee break
3.30pm – 4.15pm	<p>11. Other types of useful renewable energy data (IRENA)</p> <ul style="list-style-type: none"> i. Resource Assessment. ii. Jobs and livelihoods.
4.15pm – 5.00pm	<p>12. Field measurement and estimation of renewable energy (IRENA)</p> <ul style="list-style-type: none"> i. Measurement and estimation. ii. Energy conversion factors.

Day 3: RENEWABLE ENERGY STATISTICS AND DEVELOPMENT	
8.30am - 10.00am	Field visit travel
10.00am - 1.00pm	Field visit: bioenergy (bagasse utilisation) Field visit hosted by the Swaziland Royal Sugar Corporation to see their sugar processing operation and the use of bagasse for energy.
1.00pm - 3.00pm	Lunch and return travel
3.00pm - 4.00pm	13. Other types of useful renewable energy data (IRENA) i. Trends in renewable energy costs ii. Renewable energy investments.
4.00pm - 5.00pm	14. Data audit (IRENA) i. Assessment of data needs, availability, gaps and challenges
Day 4: PRACTICAL STEPS TO PRODUCING AN ENERGY BALANCE	
9.00am - 9.30am	15. Report back on data audit (facilitated by IRENA)
9.30am - 10.30am	16. Renewable energy in selected countries (moderated by IRENA) i. Short presentations from two participants about the collection of renewable energy data in their countries.
10.30am - 11.00am	Coffee break
11.00am - 1.00pm	17. Getting good results from messy data (facilitated by IRENA) i. Small-group exercise to extract meaningful information from raw data and present the results.
1.00pm - 2.00pm	Lunch
2.00pm – 3.00pm	18. Getting good results from messy data (continued) i. Prepare and present findings.
3.00pm - 3.30pm	Coffee break
3.30pm – 5.00pm	19. Workshop feedback, evaluation and closure.