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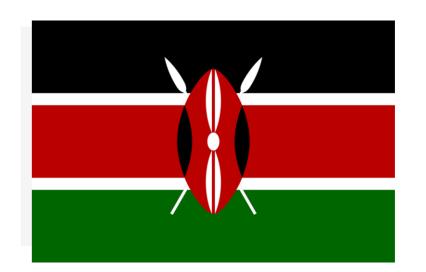


#### ICTP JOINT SUMMER SCHOOL FOR SUSTAINABLE DEVELOPMENT | 2023

# **KENYA CLEWS NEXUS**

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**RECCREC - TECHNICAL UNIVERSITY OF MOMBASA** 





#### 1. Context

Aim: Net-zero emissions and transitioning to a low-carbon economy.

Total CO2 emissions 2020 – 19,447 Kt
National Determined Contribution (NDC
2020): 32% GHG reduction by 2030 to the
BAU scenario of 143MtCo2eq

# **2.** Aim

Research Question: How can the electrification efforts in Kenya be aligned with the goal of achieving net-zero emissions?

What are the key strategies and policy interventions required?

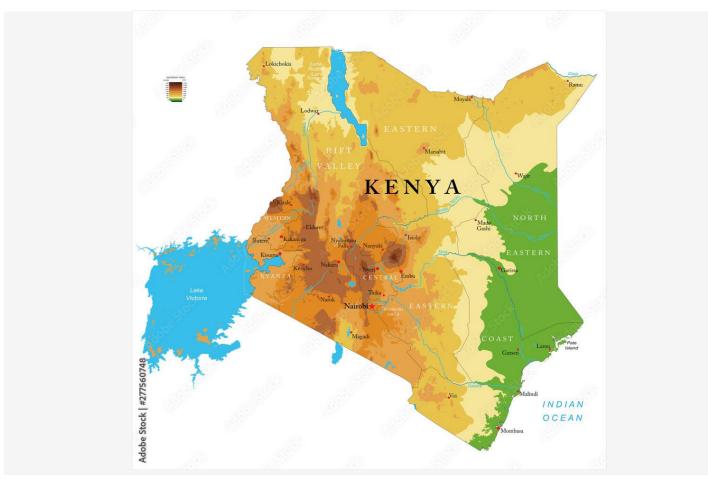


Figure 1. Map of Kenya.

### 3. Methods & Scenarios

- CLEWS Framework
- Data collected from Osemosys, IEA, MOE Kenya, FAO.
- Baseline model, Climate Mitigation scenario and Adaptation & Resilience Scenario.

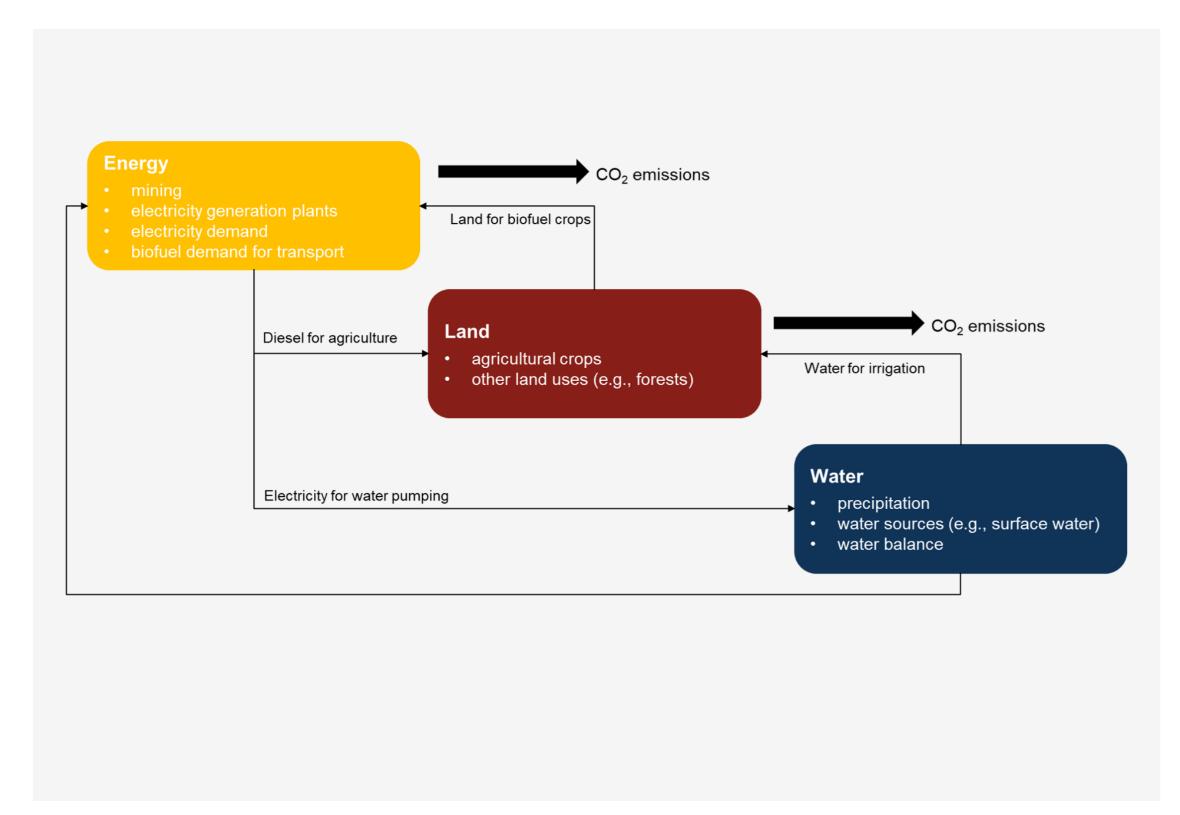
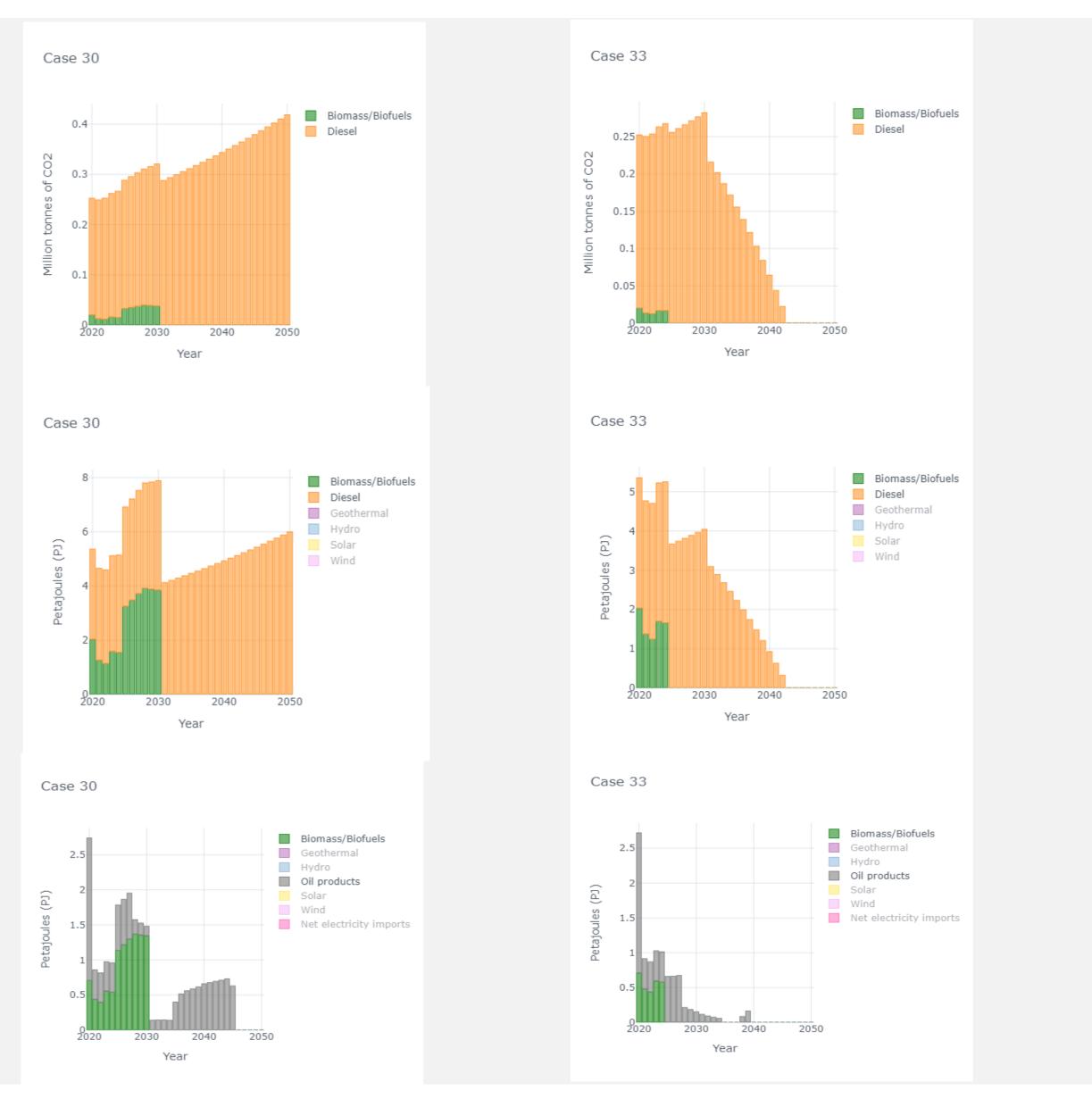


Figure 2. Reference CLEWS Diagram.

# 4. Results



# 5. Policy insights, conclusions and future work

- Conclusions: To reach net zero emissions there should be considerations towards replacing biomass fuel plants with renewable energy plants.
- Policy insights: Electrification of sectors such as agriculture and transportation would greatly reduce GHG emissions.
- Future work: Inclusion of other data sets that were not considered during this period such as transportation and extensive information on land use to expand more on the model



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# 6. References

Climate Compatible Growth Starter kits - <a href="https://climatecompatiblegrowth.com/starter-kits/">https://climatecompatiblegrowth.com/starter-kits/</a>

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