

Powering a Circular Future: Ethiopia's Waste-to-Energy Vision and the Rephie Model

AFRICA IS INVESTING IN CLEAN ENERGY GENERATION.



Ethiopia's Repi Waste to Energy Plant is proving it.

**DISCOVER IT, SHAPE IT,
JOIN #ACS2.**

8-10 September 2025, Addis Ababa, Ethiopia.
Addis International Convention Center (AICC)

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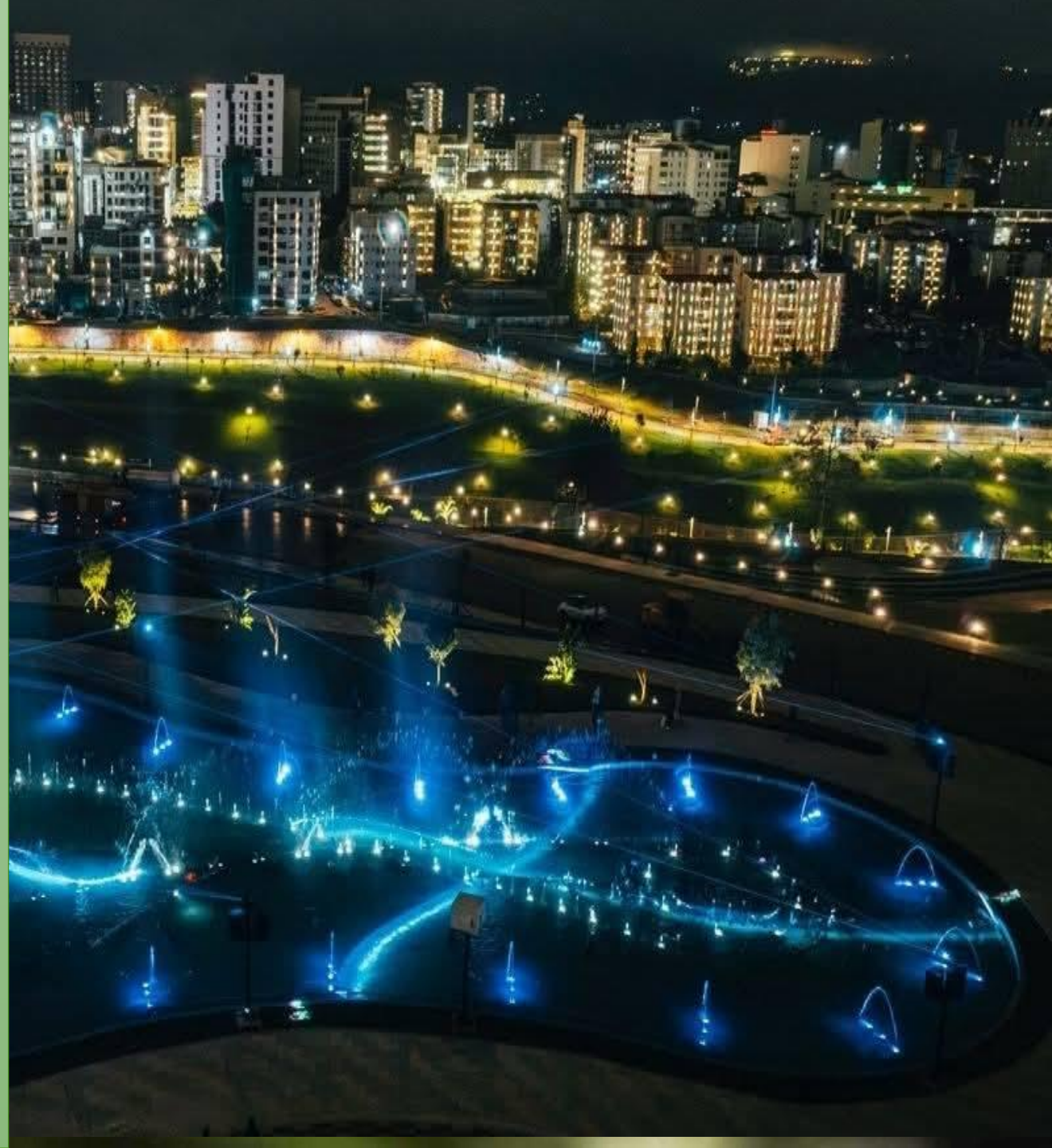
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Green Legacy Initiative
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Introduction

Ethiopia is a frontrunner in Africa's climate action, guided by its Climate Resilient Green Economy (CRGE) Strategy and other sustainability-driven policies. Rapid urbanization and population growth have intensified the country's waste management challenges. In response, the government has adopted a circular economy approach that promotes resource efficiency, waste valorization, and green development.

As part of this vision, initiatives like the Clean Ethiopia Campaign aim to mobilize citizens, improve urban sanitation, and foster environmental responsibility. The Reppie Waste-to-Energy project stands out as a flagship example—turning municipal waste into clean electricity and demonstrating the potential of integrated, sustainable urban development.





Circular Economy Strategy and Roadmap in Ethiopia

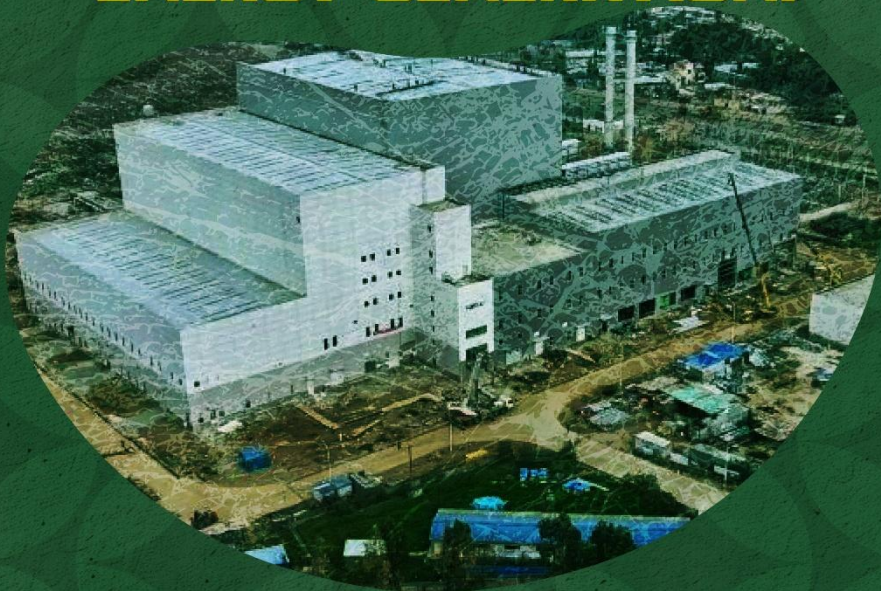
- Ethiopia has launched a **Circular Economy Roadmap** to support its green growth goals.
- It promotes **resource efficiency, waste reduction, and sustainable production.**
- The strategy aligns with the vision of becoming a **climate-resilient, prosperous nation.**
- Projects like **Reppie Waste-to-Energy** show the roadmap in action.

Legal Frameworks on Waste Management

- Policies promote sustainable resource use and integrated waste systems.
- **Solid Waste Management Proclamation:** Establishes integrated waste management systems
- Legal reforms enable public-private partnerships for circular infrastructure.
- Specific laws regulate pollution, hazardous waste, plastics, and e-waste.
- All aligned to support Ethiopia's circular economy goals.



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The case of Reppei Model Project (WtE)

- Africa's first large-scale WtE plant, processing of wastes daily.
- Converts municipal solid waste into clean electricity, reducing landfill use and emissions.
- Demonstrates economic benefits: job creation, energy generation, and waste management innovation.
- Serves as a replicable model for rapidly urbanizing countries facing waste challenges.
- Highlights the value of integrating circular economy principles with clean energy solutions.
- Encourages investment and policy support for sustainable waste management worldwide.



Green Legacy Initiative and “Clean Ethiopia Campaign”

Green Legacy Initiative:

Launched by **H.E. Prime Minister Abiy Ahmed**, aiming to plant over **46 billion indigenous seedlings** to restore degraded lands enhancing ecosystems affected by waste.

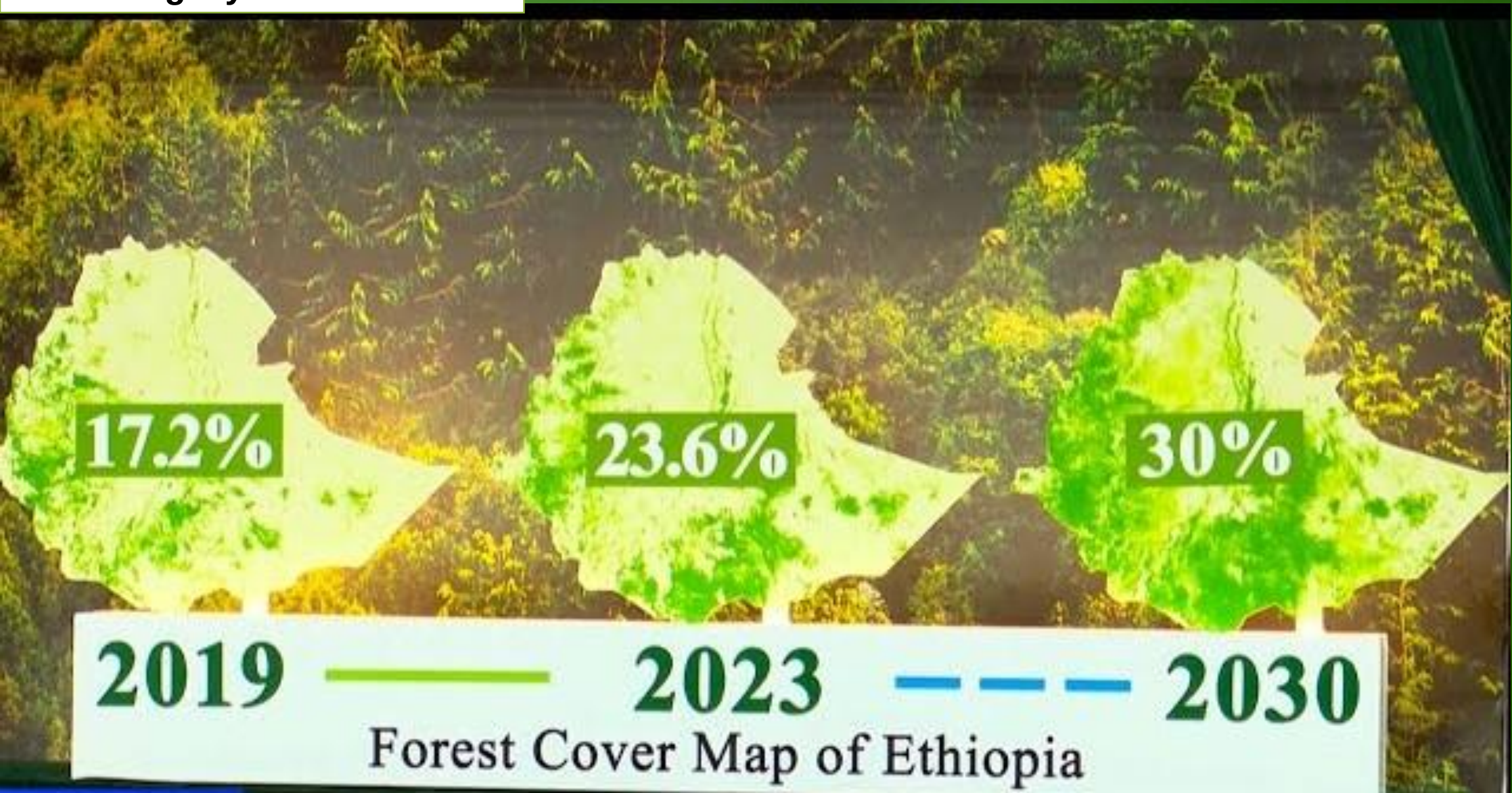
- Supports soil health and reduces pollution from unmanaged waste areas.

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Clean Ethiopia Campaign:

- Engages communities in improving waste collection and urban cleanliness.
- Raises awareness on proper waste disposal and recycling.
- Both initiatives strengthen Ethiopia's **waste management system** by promoting environmental restoration and community action, advancing the circular economy.

Green Legacy Results





THANK YOU