

# HACKATHON 2026



**Advancing Energy Affordability  
and Security in Sustainable  
Development**



**timbuktoo**  
from here to Africa's future

## ABOUT THE HACKATHON

The Energy and Petroleum Regulatory Authority (EPRA) invites applications from young innovators, students, researchers, and technology practitioners to participate in the **EPRA Hackathon 2026**, hosted as part of the **7th Regional Research & Innovation Conference (RIC)**.

As the energy sector becomes increasingly dynamic and interconnected, regulators require new approaches to complement traditional research and policy tools. This hackathon provides a platform to leverage on the creativity, dynamism, and technological expertise among the youth to explore innovative, data-driven solutions to current regulatory and development challenges.

The hackathon is designed as a hands-on, problem-solving lab, where participants will work in teams to develop prototypes, analytical tools, and insights that can inform regulatory decisions, energy planning, and sustainable development outcomes.

The hackathon aims to:

- Stimulate innovation in energy and petroleum regulation
- Build practical skills in data analytics, AI, and digital tools
- Strengthen collaboration between regulators, academia, and innovators
- Generate actionable insights and prototypes for real-world application

## HACKATHON CHALLENGES

Participants will work on problem-led, regulator-relevant challenges grounded in the decision-making contexts of energy regulators from the region ensuring solutions are practical, policy-responsive, and adaptable to diverse regulatory environments.

### Challenge 1: Optimal Tariff Design for Energy Affordability & Equity

**Theme:** Energy Access and Affordability

**Decision Challenge:** Rethinking Residential Electricity Tariffs for Fairness and Sustainability

#### Decision Problem

Kenya's current residential electricity tariff structure classifies households largely based on past electricity consumption. While simple to administer, this consumption-only approach fails to capture the true diversity of household circumstances and energy needs.

As a result:

- Low-income or vulnerable households may be misclassified and face unaffordable tariffs
- Higher-income households may benefit disproportionately from subsidies
- Utilities struggle to balance affordability with cost recovery
- Regulators lack tools to design tariffs that are both equitable and financially sustainable

#### Challenge Question

“How might regulators and utilities redesign residential electricity tariffs using multiple data variables (beyond consumption) to improve equity, protect vulnerable consumers, and ensure sustainable cost recovery?”

### Challenge 2: Reducing Transport Emissions through Data-Driven Carbon Accounting

**Theme:** Climate Action & Sustainable Mobility

**Decision Challenge:** Turning Transport Data into Actionable Emission Reduction Choices

#### Decision Problem

Transport is one of Kenya's fastest-growing sources of greenhouse gas emissions, driven by:

- Increasing vehicle ownership
- Heavy dependence on fossil fuels
- Limited public transport alternatives
- Poor visibility into fuel use and institutional transport emissions

Although many organizations and public institutions recognize the need to reduce their carbon footprint, decision-makers often lack practical, data-driven tools that convert transport activity into clear, measurable emission-reduction actions.

Without reliable accounting systems, it becomes difficult to:

- Track emissions consistently
- Compare reduction strategies
- Justify investments in cleaner transport
- Report progress toward climate commitments

#### Challenge Question

“How can data-driven carbon accounting tools help institutions measure, track, and reduce transport-related emissions?”

#### Data Considerations

Participants will work with:

- Public datasets and open data sources
- Simulated or sample datasets
- Standardized assumptions and proxies

## WHO CAN APPLY

The hackathon is open to:

- Students from universities and TVET institutions
- Early-career researchers
- Software developers, data scientists, and AI practitioners
- Startups and innovation teams
- Members of innovation hubs and tech communities

### Team Requirements

- Teams of up to 5 members
- Multidisciplinary teams are encouraged (e.g. technical + policy/research)
- Individual applicants may apply and be matched into teams

## WHY PARTICIPATE

Participants will have the opportunity to:

- Work on real-world regulatory challenges
- Showcase their skills at a national and regional platform
- Build practical experience in AI, data analytics, and problem-solving
- Engage directly with EPRA sector experts, mentors, and industry stakeholders
- Contribute to shaping future energy policy and innovation
- Gain visibility and recognition at the EPRA Regional RIC 2026

Selected teams may also:

- Receive awards and recognition
- Be considered for further collaboration or support opportunities

## KEY DATES

Milestone	Date
Call for Applications Opens	27th February 2026
Information Session	10th March 2026
Application Deadline	20th March 2026
Shortlisting & Notification	10th April 2026
Pre-Hackathon Briefing	15th April 2026
Hackathon Dates	20–23 April 2026

## SELECTION CRITERIA

Applications will be assessed using the following criteria

- Relevance to challenge areas (25%)
- Innovation and creativity (20%)
- Societal impact and scalability (20%)
- Technical feasibility (15%)
- Use of data and analytical approach (10%)
- Impact potential on energy affordability and security (10%)

## HACKATHON FORMAT

The hackathon will be conducted in-person and integrated into the conference programme.

### Structure

<b>Day 1</b>	<ul style="list-style-type: none"> <li>• Opening &amp; challenge briefing</li> <li>• Team formation</li> <li>• Ideation &amp; initial development</li> </ul>
<b>Day 2</b>	<ul style="list-style-type: none"> <li>• Solution development</li> <li>• Mentorship &amp; technical support</li> <li>• Prototype refinement</li> </ul>
<b>Day 3</b>	<ul style="list-style-type: none"> <li>• Pitch presentations</li> <li>• Judging &amp; evaluation</li> </ul>
<b>Final Day</b>	Awards ceremony

## RULES & PARTICIPATION GUIDELINES

- Participants must submit an application before the deadline
- All solutions must align with at least one hackathon challenge
- Teams must adhere to ethical standards and data use guidelines
- Solutions should be prototypes or proof-of-concept, not necessarily fully developed products
- Participants must submit a short write-up (problem, approach, insights, relevance)

## INTELLECTUAL PROPERTY (IP) TERMS

- Participants retain ownership of their ideas and solutions
- By participating, teams grant EPRA a non-exclusive, royalty-free license to:
  - Review and evaluate submissions
  - Use insights for research and policy development
  - Reference solutions in reports or conference outputs
- Any future development or collaboration will be subject to separate agreements

## AWARDS & RECOGNITION

Winning teams will be recognized during the EPRA Research Conference. Awards may include:

- Best Overall Solution
- Best Regulatory Insight
- Best Use of Data
- Most Feasible & Scalable Solution

Additional recognition opportunities may include:

- Presentation opportunities within EPRA
- Inclusion in conference communiqués
- Consideration for further collaboration

## POST-HACKATHON OPPORTUNITIES

EPRA may explore opportunities to:

- Engage selected teams for further refinement of solutions
- Facilitate collaboration with researchers and institutions
- Integrate insights into regulatory and research processes

## HOW TO APPLY

Interested applicants should submit:

- Team details (or individual application)
- Brief description of skills and experience
- Short proposal outlining:
  - Selected challenge
  - Proposed approach
  - Expected output

Applications should be submitted via:

✉ **EMAIL:**  
research@epra.go.ke

📅 **DEADLINE:**  
20th March 2026 | 23:59hrs

## CONTACT INFORMATION

For inquiries, please contact:

✉ **EMAIL:**  
research@epra.go.ke

