# African Institute of Sustainable Energy and Systems Analysis (AISESA)

AISESA is looking for 5 talented Postdoc research fellows to join its Research Program

## **About AISESA**

Energy is at the heart of Africa's development agenda and its response to climate change. Across sub-Saharan Africa, energy systems remain underdeveloped, limiting the continent's ability to achieve its social, environmental, and economic potential. This shortage is not only an infrastructure challenge but also a systemic one, rooted in inadequate institutional capacity, fragmented policy environments, and a persistent reliance on externally driven research and planning. The result is a knowledge and capacity gap, limited ownership of energy system knowledge, and a disconnect between decision-making and data and analysis. Too often, this is compounded by the limited recognition of African knowledge, with external standards applied in ways that don't always fit local realities, further constraining effective planning and implementation.

Limited institutional capacity and reliance on outside expertise slow the growth of local knowledge and risk positioning African states more as recipients than as leaders of their own energy and climate agendas. Breaking this cycle means investing in institutional and human capacities and reinforcing Africa's agency in defining its own energy future. Developing approaches grounded in African context, and led by African institutions, is therefore an urgent task.

AISESA (African Institute for Sustainable Energy and Systems Analysis) AISESA (African Institute for Sustainable Energy and Systems Analysis) is a new institute dedicated to ensuring Africa's energy transitions are designed, led, and owned by African institutions. It brings together researchers, policymakers, civil society, the private sector, and financiers to co-create knowledge, tools, and capacity tailored to African contexts.

Grounded in justice, equity, and resilience, AISESA aims to transform energy systems into engines of inclusive growth, social wellbeing, and climate resilience. Its theory of change rests on three pillars: producing context-specific knowledge, strengthening institutional and human capacity, and building platforms that connect research, policy, and practice in advancing African ownership and scientific excellence in the process. AISESA operates through five complementary work clusters that function across multiple levels: Pan-African, national, and sub-national:

- 1. Clean energy pathways for sustainable development in Africa
- 2. Effective implementation approaches tailored to local contexts
- 3. Policy and governance frameworks that enable just and inclusive transitions
- 4. Access to affordable finance and appropriate technologies
- 5. Institution and capacity building, to ensure long-term ownership and impact

Clusters 1 through 4 focus on producing actionable research and context-specific solutions, while Cluster 5 anchors these efforts by developing the institutional foundations and skills required to sustain them.

## About the clusters

## **Cluster 1: Energy Transition Pathways and Sustainable Development**

This cluster focuses on shaping Africa's energy future in ways that are just, inclusive, and aligned with the continent's development ambitions. It combines technical analysis, policy insights, and local knowledge to widen access to clean energy and support social and economic progress. Core work includes developing decision-support tools that align energy systems with national priorities and community needs; collaborating with governments and regional bodies to ensure solutions fit local realities; and work with research institutions and energy planners to foster local ownership for evidence-based decision-making.

## **Cluster 2: Effective Implementation Approaches**

This cluster addresses a central challenge in energy planning, i.e. turning models and strategies into real-world action that benefits people and economies. Too often, well-designed pathways remain on paper. Cluster 2 bridges this gap by combining technical insight with partnerships, practical delivery, and local capacity building. The work focuses on four interconnected areas: co-creating shared visions with stakeholders, adapting models to local priorities, translating results into concrete interventions, and building the capacity to scale successful approaches. By blending top-down planning with bottom-up engagement, the cluster seeks to build pathways that are technically sound, economically viable, and socially responsive.

## **Cluster 3: Policy and Governance**

This cluster focuses on the political, institutional, and governance systems shaping Africa's energy transition. It examines how power, interests, and global—national dynamics enable or constrain solutions at the energy—climate—development nexus, and whether policies align with local realities and bridge the gap between research and practice. It identifies the drivers of policy choices and assesses how governance frameworks address distributive and procedural justice. By centering justice, equity, and African agency, it provides a collaborative space for researchers, policymakers, and communities to co-create inclusive and sustainable solutions.

## **Cluster 4: Finance and Technology**

This cluster addresses the twin challenges of mobilizing finance and appropriate technologies for Africa's energy transformation. It seeks to develop knowledge and tools to support equitable, needs-based investments and technology choices grounded in policy, governance, and local realities. The work includes analysing how historical and political economic dynamics shape finance and technology landscapes; assessing financing mechanisms suited to Africa's contexts; piloting innovative approaches for fair resource allocation; and advancing Africa-centred approaches to technology adaptation and deployment. Guided by equity, justice, and local value creation, the cluster seeks to close persistent gaps in access to capital and technology.

### **Cluster 5: Building Institutions and Skills**

This cluster focuses on strengthening the institutional and human capabilities that underpin Africa's energy transformation. It takes a three-pronged approach: reviewing national policy and planning systems to assess readiness for sustainable energy transitions; validating and enriching these assessments through AISESA's practitioner network to ensure diverse perspectives are incorporated; and conducting in-depth analyses of institutional strengths, gaps, and opportunities at the national level. Guided by a needs-based framework, the cluster will seek to produce a dynamic picture of institutional readiness, grounded in African development priorities and continental frameworks. By working closely with governments, academia, and civil society, it identifies entry points for institutional strengthening, and support to knowledge systems.

# About the Research Fellow positions.

AISESA is seeking early-career African researchers and scholars who are passionate about generating new knowledge on development, sustainable energy, climate change, and systems thinking to address Africa's context-specific challenges. Candidates should be committed to building the tools and capacities needed to drive paradigm shifts in Africa's energy, climate, and development futures.

Selected fellows will be assigned to one of the five clusters, based on their expertise and research interests, and will work closely with Cluster Leads. Cluster Leads are internationally recognized scholars and practitioners (from Africa and beyond) who bring deep expertise in energy systems, governance, finance, and development. They provide intellectual guidance, mentorship, and leadership to ensure that research is rigorous, collaborative, and responsive to Africa's priorities.

By working closely with Cluster Leads, fellows will have the opportunity to strengthen their scholarship, expand professional networks, and contribute to shaping Africa's energy and development agenda. Fellows will also be expected to lead original research, oversee data collection and analysis, and help translate findings into actionable insights and outputs.

## **Key information**

Application deadline	September 30, 2025
Consultancy	AKADEMYA2063
Job title	Research Fellow
Place of work	Fellows based outside Senegal will begin with a two-month in-residence period at the AISESA Secretariat in Dakar. Once in position, all fellows are expected to participate in periodic visits to Dakar for joint activities. The role also requires travel to other African countries and partner institutions to undertake field research and stakeholder engagement.
Contract	Full-time, fixed-term contract for 36 months, subject to a performance-based evaluation after a 06 month-probation period
Consultancy	AISESA-PD-Cluster Number-2025
Reports to	The Fellow will report directly to the Secretariate, with a dotted-line reporting relationship to the Cluster Lead.
Salary	We offer a competitive salary (in USD), commensurate with experience, and a strong commitment to your professional growth through meaningful development opportunities. Please note that staff are responsible for arranging their own benefits.

# **Duties & responsibilities**

Embedded within one of AISESA's five thematic clusters, you will play a key role in shaping research agendas, building knowledge partnerships, and advancing African-led energy and development solutions. You will receive clear direction and support from experienced scholars and practitioners while contributing to the institute's collective research and engagement.

## **Key responsibilities include:**

- Mapping African country contexts relevant to the cluster (e.g., tools, data, institutions, knowledge networks, socio-technical systems, capacity gaps, policies, plans, regulations, innovations, political economy, cultural context).
- Co-designing the cluster's research pathway in collaboration with Cluster Leads, the AISESA network, and national and international partners.
- Participating in country studies, carry out research aligned with cluster priorities, and ensuring that outputs complement the work of other clusters.
- Supporting the design of innovative methodologies (e.g., open-access toolkits, models, survey instruments, dashboards) that integrate technical, socio-economic, and governance dimensions.
- Co-publishing high-quality peer-reviewed research articles, policy briefs, reports, and investment toolkits to inform practice and decision-making; contributing to cross-cluster integration through joint outputs and working papers.
- Contributing to cross-cluster integration by co-developing joint outputs, sharing methodologies and data, participating in collaborative workshops, and supporting synthesis reports that draw insights across AISESA's five clusters.
- Leading stakeholder workshops and presenting findings to scientific, policy, and governmental audiences within and beyond AISESA's network.
- Supervising and mentoring junior researchers, interns, and Youth Fellows, and contributing to AISESA training modules.
- Supporting project management, fundraising, and cross-cluster activities as required.

## **Minimum Qualifications & Experience**

- PhD in a discipline relevant to sustainable energy, climate change, and development (e.g., energy systems engineering, economics, political science, public policy, finance, environmental science).
- Proven research track record on African energy, climate, or development issues, including peerreviewed publications.
- Demonstrated ability to work effectively independently and in interdisciplinary and multicultural teams, with excellent intercultural communication skills.
- Experience engaging with stakeholders, including policymakers, industry, and civil society.
- Intercultural awareness, an analytical and impact-oriented mindset, and a commitment to delivering high-quality work to agreed deadlines.
- Commitment to inclusive and equitable development
- Commitment to AISESA's values and to African-led knowledge co-production for African development.
- Experience designing and running innovation challenges, hackathons, or incubator programs.
- Fluency in English and at least one widely spoken African language; proficiency in French, Portuguese, or Arabic is an advantage.
- For additional cluster-specific qualifications and experience, see below.

## Desirable skills

- A doctoral degree (PhD) is required; in exceptional cases, strong professional expertise may be considered in lieu of the degree.
- Professional experience working in African contexts on energy, climate, or sustainable development.
- Proven track record in research project management, capacity building, or supervision/mentorship of other researchers.
- Experience translating research into policy or practice through stakeholder engagement, practitioner experience, knowledge-sharing platforms, or advisory roles.
- Proficiency in additional data analysis tools, software, or methodologies relevant to the cluster-specific focus.
- Exceptional candidates with related expertise will be considered even if they don't match one cluster perfectly.

### We offer:

- A unique opportunity to shape Africa's direction in clean energy systems analysis and position AISESA
  at the forefront of development debates through evidence-based energy system research and
  African-owned and innovation and leaderships.
- A highly inclusive and collaborate working environment with friendly, committed and knowledgeable colleagues across 20+ countries.
- Mentoring by world-leading experts, seed funding for your pilot projects and travel support to African and global forums.

# Additional skills and expertise required per cluster

#### **Cluster 1: Energy Transition Pathways & Sustainable Development**

- Proven experience in energy and climate systems modelling and integrated planning approaches, with the ability to adapt tools to African contexts, address data gaps, and align outputs with development priorities.
- Familiarity with collaborative model development with policymakers and stakeholders, along with strong skills in interpreting and communicating modelling outputs, and translating analysis into policyand development-relevant reports and presentations.
- Experience in interdisciplinary research linking modelling and scenario analysis with socio-economic development and just transition principles.

## **Cluster 2: Effective Implementation Approaches**

- Demonstrated experience translating energy systems modelling and analysis into practical, context-specific interventions.
- Proven ability to co-create and implement solutions with governments, communities, and other stakeholders.
- Strong understanding of pathways for scaling energy transitions, including the policy, institutional, and capacity conditions required for effective implementation.

## **Cluster 3: Policy & Governance**

- Strong social science background and analytical skills with experience in climate and energy, and a proven record of working in interdisciplinary teams.
- Proven experience in policy analysis and governance assessment related to climate change, energy, or sustainable development.
- Expertise in applying political economy analysis to climate—energy—development issues, with an emphasis on African policy and governance contexts.

• Experience designing and facilitating multi-stakeholder platforms or policy labs to co-develop context-specific solutions at national, regional, or continental levels.

## **Cluster 4: Finance & Technology**

- Expertise in policy and regulatory analysis for finance instruments and technology deployment, with the ability to apply political economy analysis and an understanding of just transition frameworks
- Experience in innovation and technology adoption studies, including barriers, enablers, and knowledge systems
- Knowledge of African energy and financial landscapes, including regulatory frameworks, market dynamics, and socio-political contexts
- Competence in data management, processing, and statistical analysis using large datasets and experience in data science or machine learning for finance or energy forecasting.

## **Cluster 5: Building Institutions & Skills**

- Experience in institutional capacity assessment and mapping of policy, planning, and governance frameworks in the energy or climate sectors.
- Skills in stakeholder engagement and facilitation across government, regulatory bodies, utilities, academia, and civil society in African contexts.
- Ability to design and implement capacity-building programs, including training, mentorship, or fellowship initiatives.

## Application procedure

Submit the following as a single PDF to recruitment\_aisesa@akademiya2063.org) with the subject line Postdoc (Cluster title):

- 1. A cover letter (maximum 2 pages) outlining your cluster of interest and how your expertise aligns with AISESA's work programme and mission.
- 2. Curriculum Vitae (maximum 4 pages).
- 3. A list of relevant publications.
- 4. Names and contact details of three referees.

Shortlisted candidates will be invited to an interview and a technical exercise.

We warmly welcome applications from women and individuals from underrepresented groups.