

PRESENTATION · DIALOGUE · LAUNCH

SMART CLEAN COOKING

From diagnosis to
large-scale investment

Two days to share lessons, connect the energy transition with territorial development and explore replication across Africa.

TUESDAY 3 NOVEMBER 2026

Present and discuss

SMART CC national workshop
Shared understanding, sector coordination and operational contributions.

WEDNESDAY 4 NOVEMBER 2026

Launch and connect

Official launch of SMART CC and opening of the PIARC Forum.
Safety, regulation and logistics.

NOVOTEL · ANTANANARIVO

An initiative of the Ministry of Energy and Hydrocarbons and the Ministry of Public Works.

A shared journey, a new phase to build together

Madagascar’s clean cooking sector has developed progressively over at least 30 years, through diagnostics, trials and consultations led by the Government with support from partners including the OPEC Fund, UNIDO, UNDP, the EU, GIZ, GEF, USAID and the World Bank. Numerous NGOs, research centres and universities have implemented these efforts on the ground. The sector also draws on lessons from the wider energy sector, particularly wood energy and electrification.

A NATIONAL CHALLENGE

The transition to cleaner cooking requires simultaneous action on affordability, equipment quality, reliable supply, local capacity and user support. Transport and distribution challenges are also among the conditions for success.

HOUSEHOLD COOKING ENERGY

Clean cooking ¹	0.9%
Wood energy (total)	98.7%
of which firewood	70.2%
of which charcoal	28.5%
Petroleum products ²	0.4%

Percentages refer to all households. Firewood and charcoal are already included in the 98.7% total for wood energy.

¹ The diagnostic’s “clean cooking energy” category. ² The diagnostic’s wording; no separate kerosene figure is provided. Source: AIDES–UNIDO diagnostic, as summarised in the VAKANA report, July 2024–June 2025, p. 6; not a 2026 estimate.

THE PATH TOWARDS SMART CC

01	Understand	National diagnosis, analysis of practices and markets, identification of barriers and needs.
02	Test	Deployment of improved cookstoves, LPG, biogas, briquettes, ecological/green charcoal and electric cooking, alongside sustainable biomass supply through reforestation and energy recovery from waste.
03	Learn	Field lessons, sector workshops and preparation for results monitoring.
04	Structure	National policy, stakeholder mobilisation and mapping through the call for expressions of interest (EOI).
05	Invest	SMART CC: infrastructure, capacity, support mechanisms, value chain development, skills development and the regulatory framework.

PURPOSE OF 3 NOVEMBER

Bring stakeholders to a common level of understanding, explain SMART CC’s contribution and limits, and gather proposals to adapt its approaches and strengthen complementarity with other initiatives.

SMART CC: a project, an ecosystem

03

SMART CC and the mapping generated by the call for expressions of interest (EOI)

THE SMART CC PROJECT

USD 35 million

2026–2031. Financed by the OPEC Fund for International Development.

Technologies and fuels

Production infrastructure and resources, enterprises and artisans, quality, standards, research and market development.

Sustainable biomass

Energy agroforestry, reforestation and the use of agricultural and industrial residues and urban waste.

Communities and inclusion

Skills, trades, entrepreneurship, income-generating activities and support for women and young people.

Management and technical assistance

Steering, monitoring and evaluation, operational support and partnership coordination.

ACTORS IDENTIFIED THROUGH THE EOI

64 organisations

A knowledge base drawn from responses to the June 2026 EOI, not an exhaustive census of the sector.

BREAKDOWN BY CATEGORY

Associations and NGOs	27
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Microenterprises	17
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Small and medium enterprises	14
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Cooperatives	3
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Other organisations	3
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25 organisations at idea stage

7 at prototype stage

32 already operating

23 regions mentioned in declared intervention areas, with substantial disparities in coverage.

Instruments to be defined: grants, loans, de-risking funds, results-based financing and non-financial support. Their combination and access conditions will be specified during implementation.

SMART CC is part of Madagascar's national clean cooking policy and National Energy Compact. It must complement public, private, civil society and community investment.

SMART CC follows on from the project "Technical assistance for the development of innovative clean cooking and reforestation projects in Madagascar", implemented by UNIDO through LAMPYRIS and AIDES Développement, with funding from the OPEC Fund and under the oversight of the Ministry of Energy and Hydrocarbons.

Drawing on the project document and lessons from the call for expressions of interest, the event will host a series of discussions to enrich and adapt SMART CC's implementation arrangements.

GROUP 1

Finance according to needs

How can support for supply development be combined according to maturity, business model and expected impact?

Segmentation of project promoters; complementarity between grants, loans, risk-reduction mechanisms and technical assistance; potential use of revolving mechanisms; co-financing and disbursement milestones; access for smaller actors.

Expected output: An indicative matrix linking profiles, needs, instruments and conditions for success.

GROUP 2

Structure value chains

How can public action, private investment and national capacity development work together?

Allocation of functions among actors; balance between imports, assembly, local manufacturing and fuel production; research and development; technology transfer; quality, maintenance and spare parts.

Expected output: Proposals on complementary responsibilities and the progressive development of local capacity.

GROUP 3

Reach underserved areas

Which models can serve rural, remote or low-purchasing-power areas that the market does not adequately cover?

Solutions adapted to local resources and practices; distribution networks; last-mile incentives; partnerships with NGOs, local authorities and cooperatives; the role of schools, health centres and other institutional kitchens.

Expected output: A typology of areas linked to technical, economic and partnership models.

A COMMON IMPACT FRAMEWORK FOR ALL THREE GROUPS

Sustained use, affordability, health, forest resources, jobs, inclusion of women and young people, and rural coverage. Each group will identify its priorities, the conditions for success and issues requiring further technical assistance.

Connect resources, businesses and consumers without leaving rural areas behind

Roads carry more than fuel. They connect resources, production units, storage facilities, distributors and users; they also determine access to equipment, spare parts and maintenance. Connectivity therefore helps clean solutions spread, but it must be accompanied by rules to prevent it from accelerating unsustainable exploitation of forest resources.



Reduce the cost of reaching consumers (urban and rural)

- Produce locally where appropriate: use sustainable resources and avoid unnecessary transport, distinguishing sustainable from unsustainable supply chains.
- Adapt incentives: examine the support needed where the market alone cannot cover delivery costs.
- Involve local actors: local authorities, NGOs, cooperatives, artisans and institutional kitchens.

Secure supply flows and protect resources

- Prevent disruptions: examine stocks, routes and continuity of supply.
- Protect infrastructure: take vehicle loads and traffic conditions into account.
- Make controls consistent: clarify responsibilities and avoid contradictory requirements.
- Prevent unsustainable wood-energy exploitation: accompany better road access with rules, controls and traceability.

Expected results

The day of 4 November is expected to enable:

- The institutional launch of SMART CC;
- A better understanding of infrastructure's role in the clean cooking transition;
- Identification of the main logistical barriers;
- Clarification of safety issues in fuel transport;
- Identification of regulatory and enforcement needs;
- Inclusion of wood-energy and charcoal traceability in the discussions;
- Closer engagement among energy, environment, transport and infrastructure actors;
- Introduction of SMART CC issues into the PIARC seminar's international exchanges.

3 November | understand and discuss

06

SMART CLEAN COOKING national workshop · Novotel · 08:00–17:30

TIME	SESSION	INDICATIVE CONTENT
08:00–08:30	Registration and welcome	Registration and distribution of materials.
08:30–09:00	Workshop opening	Opening remarks, objectives and expected results. Speakers to be confirmed.
09:00–09:40	Why SMART CC now?	Sector challenges, national policy and the National Energy Compact.
09:40–10:30	From diagnosis to SMART CC	AIDES/UNIDO studies; VAKANA/LAMPYRIS interventions; lessons from trials.
10:30–10:50	Coffee break	
10:50–12:10	Presentation of SMART CC	Components, beneficiaries, governance, timeline and general support mechanisms.
12:10–12:40	Clarification questions	Scope, expected contribution and limits of the project.
12:40–13:40	Lunch	
13:40–14:25	Mapping from the EOI	Actors, technologies, maturity, areas and support needs, presented in aggregate.
14:25–15:10	Coordination and regional cooperation	Complementarity with programmes and financing; discussion of adapting Madagascar's experience to other countries.
15:10–15:30	Coffee break	
15:30–16:30	Operational dialogue	Three groups: support instruments, value chains and territorial inclusion.
16:30–17:05	Working group feedback	Priority proposals and responses from the implementation and technical assistance teams.
17:05–17:20	From 3 to 4 November	Roads and clean cooking: transport safety, regulation, logistics and rural access.
17:20–17:30	Closing	Summary and next steps.

Indicative programme. The workshop is informative and consultative: it is not intended to approve the project or select beneficiaries.

Connectivity, safety and regulation of clean cooking value chains

The institutional launch of SMART CC will be associated with the opening of the PIARC Forum. Dialogue with road-sector actors will address a practical condition for scaling up: transporting fuels and equipment safely, reliably and affordably, and connecting resources, production sites and markets.

Two presentations are proposed for the session on territorial accessibility and services to isolated areas. The themes below specify their contribution to SMART CC.

PRESENTATION 1

Safe transport of fuels and equipment

How can transport, storage in transit, handling and distribution of clean cooking fuels be made safe?

Risks and compliance: appropriate containers, vehicles and loading, particularly for LPG, ethanol and, where relevant, packaged biogas.

Skills and prevention: driver and distributor training, handling and incident management.

Responsibilities: obligations of producers, carriers, distributors and regulatory authorities.

Service continuity: equipment, spare parts and supply to remote markets.

PRESENTATION 2

Regulation and traceability of wood energy and alternative fuels

How can flows of firewood, charcoal, biochar and briquettes be organised and controlled, taking their origin and characteristics into account?

Rules and documentation: permits, checks and requirements applicable to the products transported.

Fuel origin: traceability of raw materials and verification of supply.

An appropriate framework: consideration of biochar, briquettes and other alternative fuels.

Public coordination: links among energy, environment, transport, public works and enforcement agencies.

WHAT SMART CC SHOULD GAIN FROM THESE EXCHANGES

Identify needs in standards, training, enforcement, traceability and logistics so they can be better integrated into support for operators and the project's territorial deployment.

HIGHLIGHTS OF 4 NOVEMBER

SESSION	CONTRIBUTION TO CLEAN COOKING
Official opening	Institutional launch of SMART CC and opening of the PIARC Forum.
Safety presentation	Transport, handling, storage in transit and operators' responsibilities.
Regulation presentation	Control of flows, fuel origin and adaptation of regulatory frameworks.
Session discussions	Delivery costs, rural access, local production and coordination between energy and transport policies.

The order of presentations, speakers and time slots will be confirmed in the official PIARC programme.

Adapt Madagascar's experience to expand clean cooking across Africa

Madagascar's experience offers an approach worth sharing: linking diagnosis, public policy, field trials, stakeholder mobilisation and investment. Replication means adapting this architecture to each country's priorities, rather than reproducing its technologies or mechanisms unchanged.

SIX TRANSFERABLE ELEMENTS

01 Diagnosis and public policy

Establish a national baseline, analyse practices and markets, then translate needs into policy directions and an action plan.

03 Actors and coordination

Bring public authorities, businesses, research, civil society and communities together around shared goals.

05 Financing scale-up

Connect preparation, technical assistance and investment; adapt grants, loans and risk reduction to needs.

02 Trials and data

Test solutions, document costs, performance and adoption, then organise results monitoring.

04 Mapping and support for promoters

Identify initiatives, distinguish levels of maturity and prepare transparent support mechanisms.

06 Results and carbon finance

Examine results-based financing and carbon potential, subject to feasibility and impact verification.

SADC as a framework for regional cooperation

The Southern African Development Community (SADC) provides a relevant framework for sharing methods, expertise and experience. Delegations can identify national priorities, lead institutions and the adaptations needed in resources, cooking practices, purchasing power, logistics and regulation.

Programme reports describe preparatory work in Botswana and Comoros, as well as in Togo and Somalia beyond SADC. This portfolio opens a prospect for expansion across Africa; activation remains dependent on mobilising financing and coordination with each country.

FROM SHARING EXPERIENCE TO PREPARING PROGRAMMES

Exchanges with delegations will aim to identify a national entry point, lessons to transfer and technical assistance needs. Any operational follow-up must be led by the relevant authorities and assessed with financing partners, without presuming a financing agreement.

Participate and continue the dialogue

09

Practical information, institutions and expected follow-up

DATES AND VENUE

Novotel, Antananarivo

Tuesday 3 November 2026

National presentation and operational dialogue workshop: 08:00–17:30.

Wednesday 4 November 2026

Official launch of SMART CC and opening of the PIARC Forum.

Participation and contacts

Arrangements to be specified by the organisers.

Planned languages

French and English.

INSTITUTIONAL INITIATIVE

Ministry of Energy and Hydrocarbons

Ministry of Public Works

SMART CC FINANCING

OPEC Fund for International Development

IMPLEMENTATION

Project owner: Ministry of Energy and Hydrocarbons.

Executing agency: Integrated Growth Poles Project (PIC), with specialised technical assistance.

Diverse stakeholders, a shared understanding

Public institutions, donors, businesses, artisans, NGOs, cooperatives, local authorities, financial institutions, incubators, universities and partner projects are invited to contribute. Regional and international delegations can share their experience, without implying commitments to financing or replication.

After the workshop: capture lessons and follow up

A synthesis for the implementation and technical assistance teams should capture priority proposals, issues requiring further examination and areas of complementarity to explore. The workshop informs operational choices without replacing decision-making bodies.

PIARC PROGRAMME AND FURTHER INFORMATION

For the official programme, timings, participation arrangements and logistical information, consult the seminar calendar on the PIARC website.

[Open the official PIARC calendar](#)

<https://www.piarc.org/fr/Agenda-Actualites-PIARC/calendrier-evenements/calendrier-seminaires-PIARC>