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MINISTRY OF ENERGY TRANSITION AND SUSTAINABLE DEVELOPMENT  
- ENERGY TRANSITION DEPARTMENT -

# MAGAZINE

THE AFRICAN FORUM ON ENERGY EFFICIENCY



**THEME:**  
**INNOVATIVE FINANCING AND  
TECHNOLOGICAL INNOVATIONS  
FOR SUSTAINABLE ENERGY**

**12 MAY 2026**

**11<sup>TH</sup>  
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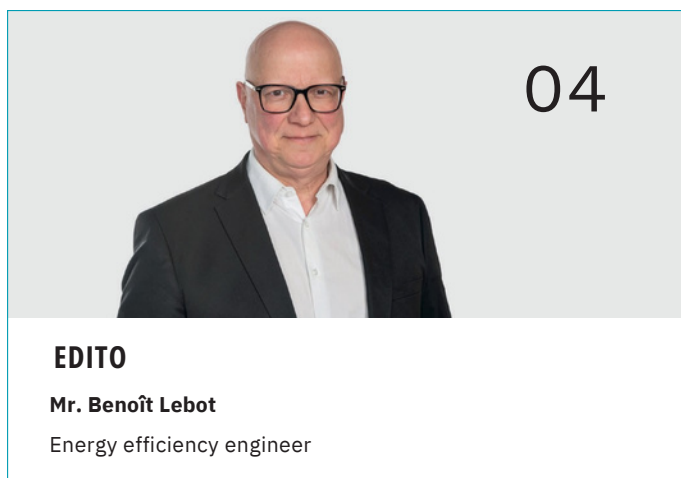
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**Mr. BENOÎT LEBOT**

Energy efficiency engineer

## ENERGY EFFICIENCY, KEY TO RESILIENCE AND SUSTAINABLE DEVELOPMENT IN AFRICA AND BEYOND



**Casablanca, May 2026 – As the world faces a new energy crisis, marked by a surge in oil barrel prices and its cascading repercussions – skyrocketing inflation, recession fears, and social tensions –, one piece of evidence stands out: energy conditions our economic development, our social stability, and our daily lives. Oil shocks recall, once again, the fragility of our economies in the face of a persistent dependence on fossil fuels, and the urgency to act to reduce this vulnerability.**

It is in this context that Casablanca is hosting, for the 11th consecutive year, the African Energy Efficiency Forum, an essential gathering for specialists, decision-makers, and innovators from Africa and Europe. This event, organized by the AOB Group, offers a unique platform to exchange, debate, and mutually enrich perspectives on the challenges

and solutions related to energy efficiency. A theme more relevant than ever, as energy, climate, and economic challenges intertwine.

The surge in energy prices has an immediate effect: it makes investments in energy efficiency more profitable than ever. Every saved kilowatt-hour is a kilowatt-hour that does not have to be purchased at an exorbitant price. Companies, local communities, and households find in it a lever for competitiveness and purchasing power. According to the International Energy Agency (IEA), every dollar invested in energy efficiency can generate up to 3 dollars in economic benefits, thanks to savings achieved on energy bills and the reduction of operational costs.

Beyond economic gains, energy efficiency is one of the most effective tools for reducing greenhouse gas emissions. While climate change accelerates – with consequences already visible in Africa, where heatwaves and droughts are multiplying –, reducing our consumption

of fossil energy becomes an absolute priority. Numerous international bodies, from the UN to the OECD, estimate that energy efficiency could contribute up to 40% of the emission reductions needed by 2040 to respect the Paris Agreement.

Contrary to certain misconceptions, energy efficiency is not a drag on growth, but a catalyst for local and non-relocatable jobs. In the building sector, for example, the energy renovation of housing and infrastructure creates qualified, stable jobs anchored within the territories. In Europe, it is estimated that the energy efficiency sector already employs more than 2 million people, and this figure is bound to grow exponentially in Africa, where the needs for sustainable infrastructure are immense.

Opportunities do not stop there: industry, agriculture, and transport can also benefit from innovation in energy efficiency, whether through the optimization of industrial processes, the adoption of low-carbon agricultural technologies, or the development of sustainable mobility.

Yet, despite these well-documented economic, social, and environmental advantages, energy efficiency remains too often the poor relation of energy policies. In the minds of many decision-makers, it is relegated to second place behind renewable energies, as if the two approaches were competing rather than complementary.

However, it is precisely their combination that makes it possible to permanently escape dependence on fossil fuels. Renewable energies (solar, wind, hydro, geothermal, sustainable biomass) are indispensable for decarbonizing our energy mix, but they will not be enough on their own. Without energy efficiency, we will continue to waste a valuable portion of these clean energy resources. Conversely, without renewable energies, energy efficiency gains will not suffice to offset our global consumption.

It is time to change the model: energy efficiency and renewable energies are not alternatives, but the two pillars of a successful energy transition. It is here that the role of the AOB Group and the African Energy Efficiency Forum takes on its full meaning. For 11 years, this event has provided essential visibility to energy efficiency policies and practices.

But energy efficiency is not decreed overnight: it is a long-term process. For it to become a large-scale reality, it requires effort, and that takes time:

- Training professionals, technicians, and decision-makers on the challenges and tools of energy efficiency.
- Sharing know-how, by promoting exchanges between countries, public and private sectors, and researchers and practitioners.

- Building a common vision, from the individual to the community, including businesses and institutions.

**This 11th edition of the African Energy Efficiency Forum arrives at just the right time. In the midst of a global energy crisis, it serves as a reminder that solutions exist, and that they are accessible, profitable, and transformative. It also shows that Africa, often perceived as a continent lagging behind in the energy transition, can become a leader in the field, drawing on its dynamism, its innovation, and its youth.**

As energy and climate challenges intensify, energy efficiency must cease to be an option and become an absolute priority. **This requires:**

1

**Ambitious public policies**, with clear objectives, financial incentives, and adapted regulatory frameworks.

2

**An engagement of the private sector**, for which energy efficiency represents both a lever of competitiveness and a contribution to social and environmental responsibility.

3

**A mobilization of citizens**, because every action counts, from daily eco-gestures to major sustainable infrastructure projects.

The African Energy Efficiency Forum is much more than a simple annual gathering: it is a symbol of collective commitment to a safer, more resilient, and fairer future. Congratulations to the AOB Group for its tireless work, which keeps this momentum alive and gives energy efficiency the place it deserves.

As the world goes through a period of turbulence, energy efficiency stands out as a winning solution at all levels: economic, social, and environmental. Investing in energy efficiency means investing in our future. And it is together, by sharing knowledge and best practices, that we will be able to meet the energy challenges of tomorrow.

# BANK OF AFRICA

## DEVELOPS AN INTEGRATED APPROACH FOR A JUST TRANSITION

**If Small and Medium Enterprises (SMEs), particularly in export sectors, constitute the backbone of Morocco's industrial fabric and job market, many of them operate in sectors with high energy and water intensity, amid growing pressure on resources. This leaves them heavily exposed to Climate Risks—whether physical or transition-related—as well as the EU's Carbon Border Adjustment Mechanism (CBAM).**

### Supporting the Inclusive Decarbonization of SMEs

Morocco is committed to reducing its greenhouse gas emissions by 45.5% by 2030, an ambition reinforced by actions under its Nationally Determined Contribution (NDC). Furthermore, the requirements of the CBAM mechanism—notably the publication and verification of emissions to avoid higher carbon pricing factors—are expected to apply across all major Moroccan export sectors, particularly textiles and agrifood. Clean energy and energy efficiency thus become central issues not only to reach policy objectives, but also for SME competitiveness and market access.

At the same time, BANK OF AFRICA has always supported the development of SMEs in Morocco by structuring a support ecosystem with strong local roots. Since creating its Entrepreneurship Observatory in 2009, the Bank has forged local partnerships with over 200 actors, organized nearly 500 regional conferences, and mobilized some 15,000 MSMEs, thereby fostering MSME growth, job creation, and inclusion.

### The Pan-African Chair of Sustainability and Impact Finance

As part of its strategy in favor of SMEs, BANK OF AFRICA has developed an integrated approach to the just transition, combining capacity building, inclusion, financing, and data tools. This approach is implemented through the Pan-African Chair of Sustainability and Impact Finance, officially launched on December 19, 2023, in partnership with six leading Moroccan higher education institutions. The Chair has quickly become an operational pillar of the Bank, connecting knowledge production, skills development, and concrete results for SMEs and local economic stakeholders.



At the core of this approach lies the Capacity Impact Program, launched in October 2024 to address the growing sustainability needs of businesses. Designed to provide organizations with the tools and skills needed to integrate ESG principles into their strategies and operations, the program has already supported nearly 40 companies, particularly exporting SMEs in the textile and agrifood sectors, where ESG sustainability requirements are crucial for accessing international markets.

This program aims to strengthen business competitiveness by turning ESG constraints into value-creation levers through structured awareness-raising, practical training, and operational tools. This skills development is a prerequisite for a just transition that avoids the exclusion or marginalization of vulnerable actors facing economic and regulatory changes.

Once participating companies complete the capacity-building program, BANK OF AFRICA engages in a structured dialogue to offer

tailored financing and advisory solutions aligned with their ESG maturity level, sector trajectory, and competitiveness challenges. This continuum—from capacity building to financing and advisory—anchors the just transition into concrete, measurable, and replicable economic decisions.

**Through this initiative, BANK OF AFRICA demonstrates the pragmatic implementation of a just transition, moving beyond an exclusively ESG compliance-focused approach to build an inclusive, progressive, and impact-driven transition that serves SMEs, export value chains, and sustainable regional development.**



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# INTERNATIONAL STANDARDS: THE TRUST CHAIN THAT MAKES ENERGY EFFICIENCY BANKABLE



**Mr. PHILIPPE VOLLET**

Chairman of the Advisory Committee on Energy Efficiency, Secretary of Sub-Committee 23K on Electrical Energy Efficiency Products. Alternate French Member of the Standardization Management Board.

**There is much talk of innovation and climate finance. But on the ground, one question often decides everything: what can we trust?**

**In the field of energy efficiency, trust is not decreed: it is built through shared methods, reliable criteria, and verifiable evidence.**

**International standards provide a common language, conformity assessment provides proof, and quality infrastructure enables scaling up.**

## **From Ambition to Impact: Why Is It Still Stalled?**

Everywhere, climate commitments are multiplying, technologies are progressing, and capital is gradually turning toward the transition. Yet, massive deployment remains difficult. The reason is simple: without a common language, shared methods, and reliable criteria, it becomes impossible to compare, track, and lend credibility to results. In other words, standards turn ambition into action, and action into understandable, comparable, and steerable results.

This system exists. But more countries and regions need to participate in developing the standards that structure our world, and ensure their effective implementation.

## **Standardization: A Common Language to Avoid Fragmentation**

In energy efficiency, the questions are concrete: how do you measure the performance of a building, a piece of equipment, or an industrial process? How do you compare market solutions with one another? How do you prove that reported savings are real and durable? International standards such as those from the IEC or ISO provide this framework: definitions, test methods, benchmarks, and best practices, built through an open, consensus-based process. The result: less fragmentation, more technical alignment... and faster adoption at scale.

This is a key takeaway from the first Policy Paper published by IEC, ISO, and UL Standards & Engagement: standards are still underutilized in national and multilateral climate policies, even though they enhance comparability, credibility, and accountability.

## **Without Proof, No Saved Kilowatt-Hour**

A standard "on paper" does not save a single kilowatt-hour. What makes the difference is conformity assessment—testing, inspection, certification—that proves whether a product, service, or organization actually meets requirements. The policy paper stresses that standards only reach their full value when backed by a robust quality infrastructure built on four pillars: standardization, metrology, accreditation, and conformity assessment.

**This trust architecture produces immediate effects:** it secures investments, reduces conformity costs through harmonization, and facilitates the cross-border diffusion of efficient technologies.

## **A Strategic Issue for Africa... and for Funders**

In Africa, energy efficiency sits at the intersection of major priorities: access to affordable energy, competitiveness, growth, industrial development, resilience, and carbon footprint reduction.

**However, funders need reliable criteria to allocate capital:** comparing projects, measuring impacts, and verifying results.

**Standards and conformity are not a technical detail:** they are governance tools that enable effective policies and credible financing—in perfect alignment with a day dedicated to climate finance.



We have also noted that the explicit integration and referencing of standards in projects or policies accelerates results on the ground.

For example, the first IEC Global Impact Fund project, led by an African SME, aims to use second-life batteries to restore decommissioned off-grid solar panels—thereby not only managing e-waste, but also ensuring that off-grid energy systems are used efficiently by modeling them according to key standards.

In Namibia, IEC standards played a vital role in specifying the equipment used for the construction of renewable energy power plants, whether grid-connected or off-grid technologies. This allowed Namibia to rapidly scale up its solar power production while ensuring a safe, efficient, and resilient infrastructure.

### **Call to Action: Integrate, Cooperate, Build Capacity**

The World Bank's "World Development Report" presents standards as a "hidden infrastructure" for economic growth and sustainability. We must integrate them into our systems and take full advantage of them.

The levers exist and are concrete: reference international standards in climate/energy regulations and programs; work with the normalization system via national committees; encourage expert participation; and create incentives for adoption and certification, particularly in public procurement and financing requirements.

The most effective path is pragmatic: do not reinvent the wheel, share best practices, and build energy efficiency ramp-up trajectories "country by country, sector by sector."



**Conclusion:**  
To connect Energy Efficiency to technological innovation, innovative financing, and measurable results, the key is to build trust – and this trust is built through international standardization, quality infrastructure, and conformity assessment.



# INVESTING IN THE GREEN TRANSITION TO GAIN COMPETITIVENESS: ENERGY EFFICIENCY AS AN ECONOMIC LEVER IN MOROCCO AND WEST AFRICA



**Mr. WILLIAM C. FELLOWS**  
Managing Director, LixCap Group

**The real argument in favor of green investment is a competitive resilience argument—controlling costs and protecting against energy volatility, which weakens industrial and commercial operators.**

## **Energy Efficiency: A Logic of Costs, Margins, and Return on Investment, Not a Posture**

A lingering perception among private companies—whether industrial or commercial—is that investing in energy efficiency or green resources is driven more by brand image or compliance imperatives than by true economic logic. However, through our experience guiding green economy financing mechanisms over the past ten years, we support companies that act not on theoretical considerations or principled speeches, but on a much simpler reality: measurable cost savings, better expense control, and a tangible return on investment.

The calculation is direct. An industrial unit that reduces its energy consumption by 20 to 30%—an achievable target in most sectors through process optimization, motor efficiency, and thermal system upgrades—embeds these savings directly into its bottom line, year after year, regardless of market fluctuations. For a company where energy accounts for 10 to 25% of operating costs, this is not a marginal gain: it is a structural improvement in competitiveness.

Solar self-consumption reinforces this logic. An industrial or commercial operator installing solar PV for self-consumption doesn't just cut energy bills: it locks in a known, stable energy cost for 20 to 25 years. In markets marked by tariff uncertainty and grid volatility, this stability acts as a risk hedge, offering real value on the balance sheet.

The same economic rationale applies to circular economy investments and certified green buildings. Reducing raw material losses, optimizing inputs (water, materials): these investments lower operating costs significantly while boosting asset quality, commercial attractiveness, and operational resilience against risks (energy shocks, droughts).

## **The Model That Works: Aligned Financing and Technical Support**

The challenge has never been a lack of economic logic, but rather financing mechanisms tailored to concrete business realities—accessible capital paired with technical support capable of identifying, structuring, and validating projects that deliver real results.

This is precisely why well-designed green economy financing facilities yield results that generic financial instruments do not. Morocco provides an instructive example for the continent: since the launch of its first sustainable energy line about ten years ago, EBRD public figures on GEFF are telling. These green lines, backed by dedicated technical assistance deployed through local financial institutions, have mobilized over 340 million euros in green investments over the past decade.

What sets the best of these facilities apart is the alignment between the financing structure and dedicated technical support provided to businesses throughout the investment lifecycle.

On the ground, this support takes the form of rapid assessments—pragmatic, targeted, adapted to the actual pace of African businesses—to identify energy efficiency opportunities and translate them into bankable project files through a simple, operational, and result-oriented approach.

## **From Morocco to West Africa: A Relevant Example**

The conditions that enabled the success of this approach in Morocco rest on dynamics that are not unique to it and can inspire other regions, particularly West Africa. African economies globally face a similar structural challenge: heavy reliance on energy imports, price volatility, under-exploited renewable potential, and a private sector chronically underserved by financing mechanisms adapted to its green opportunity for efficiency and competitiveness.

Companies best positioned to benefit—food processors, industrial operators, logistics players, commercial real estate, etc.—are precisely those for whom reducing energy costs represents the most direct competitive lever.

The green transition is not a constraint when driven by clear economic logic. It is an investment in more efficient, more resilient companies better equipped for tomorrow's markets.



Standards &  
Engagement

Policy Paper

# How to use international standards for climate action

# MISSION EFFICIENCY IN INDIA: DOUBLING ENERGY EFFICIENCY FOR GROWTH, RESILIENCE, AND GLOBAL LEADERSHIP



**ASHISH JINDAL**  
Senior Officer, Mission Efficiency,  
Sustainable Energy for All (SEforALL)



In early 2026, India quietly crossed a historic threshold. With more than 283 GW of non-fossil capacity, the country became the world's third-largest renewable energy market, behind China and the United States. On several peak days, renewables covered more than half of the national electricity demand, illustrating the scale and speed of the country's energy transformation. But while record heatwaves drove peak demand to 256 GW as early as April 2026, a clear signal emerged: India's next energy transition chapter will not be won solely by adding capacity. It will depend on energy efficiency and energy use flexibility.

The Indian transition is moving from installed gigawatts to managed gigawatts. At the heart of this evolution lies energy efficiency—the country's most powerful, yet often underestimated, tool to reconcile economic growth, affordability, and power system resilience.

This turning point materialized in 2025, following the National Conference on Doubling the Rate of Energy Efficiency and Sustainable Cooling, where India's Ministry of Power announced a major

national objective: double the rate of energy efficiency improvement by 2030, with a target cumulative reduction of 89 million tonnes of oil equivalent (Mtoe). This commitment repositions energy efficiency from a supporting policy to a strategic pillar of India's energy transition, enabling economy-wide savings, strengthening energy security, and significantly reducing emissions.

## From G20 Momentum to Operational Implementation

Energy efficiency gained unprecedented political momentum during India's G20 Presidency in 2023, where it was promoted as a core pillar of sustainable lifestyles under Mission LiFE.

India's leadership led to key results, notably the Strategic Plan to advance energy efficiency across demand sectors and the G20 Voluntary Action Plan targeting a doubling of the global rate of energy efficiency improvement by 2030—repositioning energy efficiency as true global infrastructure, rather than a marginal intervention. Building on this momentum, Sustainable Energy for All (SEforALL) works closely with national and subnational partners to turn ambition into concrete action

through a multi-year, systemic program named Mission Efficiency in India. The goal: move from declarations to implementation.

Over the past two years, this approach has begun transforming India's energy demand landscape. SEforALL supported the states of Maharashtra, Karnataka, and Rajasthan in adopting demand flexibility regulations—a first in the country—defining distributor obligations, enabling aggregator emergence, and laying the groundwork for performance-based procurement. These reforms should help unlock.



This exchange highlighted India's end-to-end approach—from low-GWP manufacturing and circular economy practices to bulk procurement, ESCO models, and the National Cooling Action Plan—while emphasizing human impacts such as jobs, skills, and local centers of excellence.

This momentum now extends to ASEAN, where Mission Efficiency supports the drafting of regional guidelines and implementation frameworks for energy efficiency.

up to 4 GW of demand flexibility, offering a cost-effective alternative to building new generation capacity.

In parallel, SEforALL published a national white paper on demand flexibility, ran implementation programs with operators, strengthened regulatory capacity, and developed an analytical tool enabling grid operators to steer real-time demand. This coherent package—linking regulation, analysis, and execution—positions India at the global forefront of demand-side innovation.

### Making Efficiency Bankable

Mission Efficiency relies on a key principle: to scale up, efficiency must be bankable. The program aims to transform political ambition into investment-ready projects through ready-to-invest programs, blended finance mechanisms, and ESCO-driven models (energy service companies), reducing initial costs while guaranteeing performance-based results.

This approach is already producing concrete results. In Haryana, modernizing cold chains strengthens agricultural sectors, while in Kerala, ESCO-led public sector interventions demonstrate that efficiency can simultaneously support decarbonization, affordability, and grid reliability without compromising service quality.

At the federal level, SEforALL continues to collaborate closely with the Bureau of Energy Efficiency (BEE) to strengthen coordination, build technical capacity, and ensure greater alignment between national and state-level actions, guaranteeing the sustainability of reforms.

### From National Leadership to Global Influence

As India prepares to assume the BRICS chairmanship in 2026 under the theme "Building resilience, innovation, cooperation, and sustainability," its energy efficiency leadership takes on growing international relevance. The demand growth challenges, heat peaks, and renewable integration it faces today are also emerging across Africa and Southeast Asia.

India is responding by sharing not only its policies, but also its practical solutions. In October 2025, a high-level delegation from Kenya and Ghana participated in a South-South exchange on sustainable cooling, supported by Mission Efficiency in partnership with the BEE and EESL.

### A New Chapter for the Energy Transition

India's experience sends a strong message: energy efficiency is not the quiet sibling of clean energy; it is the force multiplier. By treating efficiency as system infrastructure and flexibility as a clean system resource, India is laying the foundation for a transition that is not only cleaner, but also more resilient, affordable, and inclusive.

Through Mission Efficiency, SEforALL is proud to support this trajectory, anchoring India's leadership in supporting emerging economies to move from ambition to concrete, bankable, and replicable action across the Global South.



**SOURCES**



# GREEN FINANCE: FINANCIAL INSTITUTIONS AT THE HEART OF OUR ENERGY SOVEREIGNTY ARCHITECTURE



**Mr. MOHAMMED BENAHMED**

International expert in sustainable development strategy and financing, winner of L'Économiste Prize for research in economics, management, and law, 1st edition 2005

## A Financial Lock, Not a Technological One

The African continent faces a climate paradox whose cruelty is matched only by the urgency to address it. While Africa produces less than 4% of global greenhouse gas emissions, it remains the region most severely hit by the devastating consequences of climate disruption. Added to this geographical injustice is a deep structural financial asymmetry: access to investment capital. According to data from the Climate Policy Initiative (2023) report, the continent captures barely 30 billion dollars per year in climate finance, against vital needs estimated at 250 billion dollars annually by 2030. The macroeconomic gap is staggering.

Yet, the assessment made by industrialists today is unequivocal: the main bottleneck in the African energy transition is not technological. Energy efficiency solutions—ranging from advanced building thermal insulation to new-generation air conditioning systems, smart grid digitization, and process optimization—are mature, proven, and available on the market. The major hurdle now lies in

financial engineering, regulatory frameworks, and institutional capacity to mobilize private capital at scale in geographies perceived by markets as high-risk. The stakes: shift from a counter logic to a true systemic financing architecture for decarbonization.

## From the Bitter Failure of Kyoto to the Promise of the Paris Agreement

The history of carbon finance in Africa has long been marked by inefficiency. For two decades, the Clean Development Mechanism (CDM) under the Kyoto Protocol, overly cumbersome and bureaucratic, was largely captured by emerging Asian economies. It left Sub-Saharan Africa with a residual share of less than 3% of registered projects.

The Paris Agreement, particularly through its Article 6, introduced a true methodological breakthrough. Bilateral "carbon" markets, the monetization of "internationally transferred mitigation outcomes" (ITMOs), and the rise of voluntary carbon markets are reshaping the climate finance landscape. Certification bodies like Gold Standard or Verra now approve African projects with unprecedented agility, channeling capital from corporate buyers committed to "Net Zero" strategies.

In this new era, Morocco positions itself as an undisputed pioneer. Its Nationally Determined Contribution (NDC), raised in 2021, sets the ambition of a 45.5% reduction in its emissions by 2030. Its 2025 NDC sets an even higher goal: a 53% reduction in its emissions by 2030 (including 21.6% unconditionally).

This trajectory, driven by the Moroccan Agency for Energy Efficiency (AMEE), surgically targets the building, industrial, and transport sectors. However, the viability of these projects requires reliable national registries and the intervention of catalytic actors, such as the KLiK Foundation or the EBRD, to bring the necessary capital and structuring expertise.

## Financial Institutions: The Major Mindset Shift

The most striking evolution in recent years lies in the deep transformation of major international financial institutions. Once relegated to the role of lenders of last

resort for heavy infrastructure, they now act as true architects of the African green ecosystem

The GEFF model (Green Economy Financing Facility) deployed by the EBRD in Morocco is a perfect illustration. It relies on a smart indirect refinancing approach: the EBRD injects liquidity into local banks while strengthening their technical capacity to assess risks linked to green projects. A Moroccan SME wishing to modernize its air conditioning system can thus benefit from a subsidized green loan backed by an investment grant of up to 15%, notably via the Tatwir Croissance program. The cornerstone of this scheme is the SR500 program, a rigorous benchmark cataloging over 500 pre-certified green technologies, creating a whole ecosystem of equipment where ecological profitability is guaranteed.

In parallel, the African Development Bank has turned energy efficiency into a cross-cutting priority of its continental strategy. Its ambitious Desert to Power initiative, designed to electrify 250 million people across the Sahel via solar energy, proves its capacity to unite powerful financial coalitions.

Very early in 2024, the AfDB drew record demand of over 3 billion dollars for its first global issuance of sustainable hybrid bonds.

# THE ARCHITECTURE OF AFRICAN ENERGY SOVEREIGNTY

From financial engineering to systemic decarbonization — 11th edition of the African Energy Efficiency Forum

## THE AFRICAN CLIMATE PARADOX

**Urgency:** < 4% of global GHG emissions.

**The Financial Gap:** Current capture of \$30B/yr vs. Real needs of \$250B/yr (by 2030).

**The Bottleneck:** Is no longer technological; it resides in financial engineering.

## CUTTING-EDGE FINANCIAL ENGINEERING

**Breakthrough (Art. 6 of Paris):** Agility via Gold Standard & Verra.

**Blended Finance:** Proven multiplier effect: \$1 public = \$4.4 private catalyzed.

**Innovation:** SLBs (Sustainability-Linked Bonds) and AI (Carbon Cluster) to automate MRV.

## INSTITUTIONAL MINDSET SHIFT

**EBRD (GEFF Model):** Indirect refinancing, 15% subsidies (Tatwir), SR500 pre-certified repository.

**AfDB:** Desert to Power initiative and record emission of \$3B in hybrid bonds.

**IFC:** EDGE Program for sustainable real estate promotion.

## MOROCCO, HUB OF SOVEREIGNTY

**2025 NDC Ambition:** Targeted emission reduction of -53% by 2030 (AMEE).

**Regulatory Corpus:** Laws 13-09 and 47-09. MEPS standards generating up to 70% energy savings.

**African Vocation:** Structure and de-risk products via CFC and the AfCFTA.

a first for a multilateral development bank. On its end, the International Finance Corporation (IFC) is reshaping real estate development through its EDGE program, a sustainable construction certification paving the way for preferential financing.

### Cutting-Edge Financial Engineering: Blended Finance and Artificial Intelligence

To unlock private investment, financial engineering must dare to be sophisticated. Blended finance stands out today as the ultimate tool. Its mechanism is remarkably effective: injecting public concessional capital to absorb the first-loss risk of a project (partial credit guarantees, subordinated financing) in order to reassure private funds. Convergence Finance data confirms it: every dollar of public concessional money catalyzes an average of 4.4 dollars of private financing on our markets. Innovation also extends to Sustainability-Linked Bonds (SLBs). Unlike traditional green bonds, this debt security directly links its interest rate to the issuer's ESG performance: if an industrial player achieves its decarbonization targets, its debt burden decreases. Added to this is the surge of Artificial Intelligence... Carbon Cluster... This digitalization democratizes access to financing for SMEs by reducing delays

and costs, while strengthening the quality of Measurement, Reporting, and Verification (MRV) frameworks—the ultimate guarantors of market credibility.

### Morocco: Green Finance Hub and Laboratory for African Sovereignty

If Morocco earns market confidence, it is thanks to the solidity of its regulatory framework built over a decade: Law 13-09 (Renewable Energies), Law 47-09 (Energy Efficiency Code), MEPS standards led by IMANOR and AMEE.

The commercial cooling example is telling: pilot projects led by AMEE on air conditioning equipment generated up to 70% energy savings, in compliance with MEPS standards and the Montreal Protocol framework. Backed by this credible regulatory framework, its institutional stability, and the depth of Casablanca Finance City (CFC), the Kingdom holds the assets to establish itself as the major regional financial hub tasked with structuring, de-risking, and distributing climate financial products toward Sub-Saharan Africa.

### The Imperative to Scale Up

However, scaling up still faces structural friction: continental regulatory fragmentation that the AfCFTA must help resolve, a critical shortage of local skills in complex financial structuring, and a lack of reliable MRV data infrastructure.

**The African energy transition is at a major inflection point. Green finance will not sustainably transform our continent unless it is designed as the spearhead of our energy sovereignty, rather than as a new form of dependence on Northern capital. It is by forging our own financial engineering capabilities and fostering strategic dialogue spaces, such as the African Energy Efficiency Forum, that we will succeed in tracing, with our own hands, the trajectory toward the sovereign decarbonization of our economies.**

# BEYOND ENERGY EFFICIENCY:

## THE ROLE OF EPR AND INDUSTRIAL SYNERGIES IN THE ENERGY TRANSITION



**SOFIA SAPOZHNYKOVA**  
Energy/Climate Change Expert,  
puREsource



**AGNÈS CHANUT,**  
Project Specialist, UNIDO

Facing the intensification of energy and climate challenges, decarbonization has become a top priority for the industrial sector. It constitutes an essential step toward achieving greenhouse gas emission reduction targets, particularly within the framework of Nationally Determined Contributions (NDCs), while enhancing business competitiveness. However, although indispensable, an approach focused solely on energy efficiency proves insufficient given the scale of transformations to be undertaken.



In many industrial sectors, energy consumption remains a major source of emissions. These emissions fall mainly under Scope 2—that is, those associated with purchased and consumed electricity—but also Scope 1, which corresponds to direct emissions from on-site fuel combustion. In Morocco, industry accounts for nearly 17.7% of total energy consumption, in a context of high dependence on energy imports. In certain sectors, energy costs can reach up to 40% of production costs. In this context, improving energy efficiency constitutes a priority lever that is both economic and environmental. Nevertheless, this approach addresses only part of the problem.

Industrial decarbonization relies in reality on a combination of complementary levers that must be mobilized in a coherent and progressive manner.

Beyond energy efficiency, this involves material efficiency, the use of low-carbon energy and inputs, process electrification, and, in the longer term, carbon capture, utilization, and storage. These levers are not mutually exclusive alternatives, but rather a portfolio of interdependent options whose relevance depends on sector-specific characteristics, processes, and local contexts.

The experience of UNIDO and puREsource shows that the most significant transformations often occur upstream, at the level of resource utilization. Material efficiency, which consists of producing more while using fewer raw materials and generating less waste, allows for a simultaneous reduction in energy consumption and associated emissions. Even before modifying energy sources, it is thus possible to significantly decrease a product's carbon footprint by rethinking its design and inputs.

The development of solutions such as LC3 cement (Limestone Calcined Clay Cement), which relies on the partial substitution of clinker with calcined clay and limestone, illustrates this logic: this innovation makes it possible to reduce emissions by up to 40%, while relying on widely available materials and processes compatible with existing infrastructure. In this perspective, the RECP (Resource Efficient and Cleaner Production) approach takes on its full meaning, integrating—beyond energy—the management of water, raw materials, waste, and processes, thus concrete identification of losses, inefficiencies, and flow recovery opportunities.



on imports, reinforcing the need for more efficient resource utilization. Furthermore, the tightening of international climate performance requirements—notably through mechanisms such as the European Union's Carbon Border Adjustment Mechanism (CBAM)—increases pressure on industries to accelerate their transition.

In Morocco, these issues align with a broader dynamic of energy and industrial transformation. The targets set under the NDCs, along with ongoing efforts to enhance industrial competitiveness, create a favorable framework for deploying these approaches. In this context, industrial parks can play a key structuring role as platforms for experimenting with and implementing integrated decarbonization solutions.

Beyond enterprise-level actions, the transition toward a low-carbon industry also calls for transformations on a systemic scale. Eco-Industrial Park (EIP) approaches illustrate this potential by promoting the sharing of infrastructure, services, and the development of industrial synergies. These dynamics optimize resource utilization (energy, water, materials) and turn by-products into inputs for other companies. They offer efficiency and competitiveness gains hard to achieve individually, while strengthening the resilience of industrial zones.

In this logic of scaling up, the implementation of these approaches is today facilitated and accelerated by structuring global initiatives, such as the Global Eco-Industrial Parks Programme (GEIPP), implemented by UNIDO and funded by SECO for over ten years.

This program, deployed notably in Africa, Asia, and Latin America, supports the transformation of industrial parks based on EIP principles by combining methodological tools, capacity building, and support for identifying concrete projects. Since its inception, it has helped avoid more than 230,000 tonnes of CO2 equivalent per year, generate over 150,000 MWh of annual energy savings, and support the development of roughly 57,000 MWh of additional renewable energy.

These results rely largely on the adoption of collective solutions and the development of industrial synergies, with nearly 40 synergies identified or implemented, as well as a growing number of investment projects within parks. In the African context, these approaches present particularly significant potential.

Rapid growth in industrial demand, combined with structural constraints related to energy access and dependence

In short, while energy efficiency is an essential entry point, it cannot alone meet the challenges of the industrial transition. A more systemic approach—combining several technical levers and integrating a collective dimension at the level of industrial territories—appears necessary to reconcile economic performance, energy security, and emission reductions. It is in this articulation between actions at the firm level and dynamics at the scale of industrial ecosystems that lies one of the main transformation levers for a sustainable and competitive industry.

# NEW DECISION-SUPPORT TOOLS TO ACCELERATE THE ENERGY AND LOW-CARBON TRANSITION OF CITIES IN FRANCE



**Mr. Michel Salem-Sermanet**, CEO, Efficacy

**France's climate targets require significantly increasing our annual CO2 emission reduction efforts from 3% to 5% every year until 2050. In France, a largely urbanized country, cities account for two-thirds of CO2 emissions. It is therefore urgent to give local authorities the means to accelerate their decarbonization, which will also have a direct impact on reducing their energy bills.**

## **What is the Efficacy Institute and what is its mission?**

Efficacy is the French R&D Institute dedicated to the energy and low-carbon transition of cities, created in 2014 on the initiative of the State. Its mission, in close link with the Ministry for Ecological Transition and ADEME, consists of developing, experimenting with, and deploying at scale new decision-support tools to help local authorities and their partners amplify their energy and low-carbon transition efforts.

Indeed, to accelerate this transition, increasing funding alone will not suffice: we must also be capable of optimizing every investment with regard to its energy and carbon impact and its cost, which is still far from standard practice today. This profound shift in practices is required across multiple scales: at the scale of urban development projects—that is, neighborhoods; at the scale of local authorities and their climate plans. Efficacy develops decision-support tools adapted to these two complementary scales.

## **Specifically, how can we evaluate and reduce the carbon impact of urban development projects?**

Just a few years ago, it was very complex because a neighborhood to be developed or renovated is not merely a collection of buildings, but also includes public spaces, energy and water networks, waste management, and mobility. That is why Efficacy, with the support of CSTB, was commissioned to develop a public reference methodology to carry out neighborhood-level carbon assessments precisely enough to serve as a decision-making aid. This is the "Quartier Énergie Carbone" method, which, along with its application software UrbanPrint, is now in the national deployment phase with ADEME's support. Its major added value is that it allows identifying the most effective actions to reduce a project's carbon footprint and evaluating how much carbon each action saves. The environmental authority as well as major banks financing urban development are beginning to require this type of carbon assessment.

It is thanks to the existence of this reference methodology and its large-scale adoption that in 2025 we launched a National Observatory that centralizes and analyzes all carbon assessments of urban development projects carried out in France. This Observatory will serve as a "compass" at both national and regional levels by indicating each year whether urban development projects are becoming less carbon-intensive, and it will help identify the most effective actions for a wide typology of projects, ultimately upskilling the entire sector.

Beyond the carbon assessment of urban development projects, it is also crucial to optimize their energy component, as it is responsible for about a third of their total carbon impact. This optimization was previously complex because a vast number of variants exist in terms of energy mix, thermal and electrical networks, storage, and building performance. This is why Efficacy and CSTB developed PowerDIS software, the first European dynamic energy simulation (SED) software at the urban scale, which allows comparing these numerous variants and choosing the best energy strategy in terms of carbon reduction, summer comfort, and cost.

## **At the local authority scale, what is your work to improve climate plans?**

The shared observation is that local action plans, known as "climate plans," are not always precise or operational enough to allow choosing among multi-year action programs and evaluating each year whether we are on the right trajectory or need to adjust the action plan.

**That is why Efficacy is developing a decision-support tool that will allow local authorities to draft much more operational climate plans. As an example, one of the top priorities of these climate plans is the decarbonization of heating and cooling needs for all buildings across the entire municipality; in this domain, recent European Energy Efficiency Directives make it mandatory for over 100 of the largest French municipalities to adopt a "Local Heating and Cooling Plan," and the Ministry for Ecological Transition recommends using Efficacy's decision-support tools for the operational implementation phase of these Plans.**

# EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT

## SUPPORTING SME GROWTH, DEVELOPMENT, AND GREEN TRANSITION



**The European Bank for Reconstruction and Development (EBRD) has been active in Morocco since opening its office in 2012, supporting the development of a dynamic, competitive, and inclusive private sector. Within this framework, EBRD's SME financing and development activities offer a comprehensive combination of financial solutions, advisory services, and technical assistance aimed at strengthening small and medium-sized enterprises (SMEs) and fostering sustainable growth.**

A central pillar of the EBRD's approach consists of improving access to finance for SMEs. The Bank works in close collaboration with local financial institutions to offer credit lines, risk-sharing mechanisms, and targeted financing programs allowing companies to invest, develop their activities, and improve their productivity. These instruments often prioritize innovation, green investments, and underserved economic segments, thereby helping Moroccan businesses become more resilient and competitive.

In parallel, the EBRD provides high-impact advisory services through its technical assistance programs, notably Advice for Small Businesses (ASB). Since 2012, the EBRD has implemented around 1,000 technical assistance projects in Morocco, connecting businesses with local and international consultants. These projects cover a wide range of business needs, including strategy development, marketing, financial management, operational improvement, digitalization, and environmental performance. Regarding the green transition, ASB has supported SMEs in conducting energy audits, assessing their carbon footprint, designing eco-friendly buildings, and carrying out ESG diagnostics.

Beyond direct support to businesses, the program also contributes to strengthening the broader entrepreneurial ecosystem. It reinforces local consultants' capabilities, promotes best practices, and facilitates knowledge transfer. The EBRD also organizes workshops, training sessions, and networking events to connect entrepreneurs with advisors, partners, and investors.

Overall, the EBRD's SME financing and development activities play an essential role in Morocco by strengthening businesses, stimulating innovation, and supporting inclusive and sustainable economic growth.

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**For technical assistance requests:**

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# HERITAGE AND ENERGY EFFICIENCY

## ON THE IMPORTANCE OF THOUGHTFUL REFLECTION BEFORE DEMOLITION: TOWARD A COMPLEMENTARY APPROACH TO ENERGY EFFICIENCY AND RESOURCE-EFFICIENT MANAGEMENT OF EXISTING BUILDINGS



### M. FRÉDÉRIC AUCLAIR

Architect DPLG, Heritage Specialist  
President of Almatoya Architecture  
Senior Honorary State Urban Planner  
& Architect

The word heritage (patrimoine) can have multiple translations and implied meanings depending on the language. In English, for instance, we speak of "heritage," which gives an understanding of past generations' choices... Do we keep, deconstruct, demolish, give away, reuse, or transform? So many verbs of action that call for project positioning within the exercise of free collective choice for each new generation—inheriting what reaches them from the past to influence possible, more or less desirable futures. The question of demolition, in the equation of energy efficiency, deserves to be asked from a broader perspective.

It is in this simple vein of philosophical reflection that France, following the years after the French Revolution, questioned the fate of large heritage estates that served as stone quarries through a logic of gradual disappearance of major monuments, whose materials were used for reuse in surrounding constructions for other purposes. We notice that it is ultimately rarely a matter of destructive political ideology inviting a tabula rasa or "urbicide," but far more often a policy of laissez-faire once control over the usage of a site vanishes...

Thus, among many other examples following the revolutionary period, numerous religious or military buildings were abandoned, dismantled, or converted. Sometimes they simply became stone quarries.

The case of Cluny Abbey in Saône-et-Loire (in current-day Bourgogne-Franche-Comté) is emblematic: after the expulsion of its occupants, nearly 90% of its architectural substance was "lost," reused in surrounding buildings.

Even today, in certain town houses, one can distinguish fragments of capitals or cornices—silent echoes of a monument that once radiated across Europe.

The model on display at the Cité de l'Architecture et du Patrimoine in Paris shows how difficult it is to reverse this transformation. (see attached photo)



Photograph Almatoya Architecture 10/2024 – Model of Cluny Abbey displayed at the Cité de l'architecture et du patrimoine – Paris, France



The example of the Hôtel des postes de Blois, designed in the 1950s, is enlightening in this regard. Threatened with demolition as part of a real estate project, the post office will ultimately be preserved. Not only for its architectural interest, but ultimately above all because the overall energy balance demonstrates that its reuse

Architects, project owners, States, local authorities, and businesses are relearning to examine and draw inspiration from existing structures, fostering deeper appreciation. Restoration becomes a creative act, skillfully blending past, present, and future elements.



Photographs Almatoya Architecture 09/05/2025 – The Cité de Carcassonne and the passage of the Canal du Midi between Mediterranean and Atlantic – Aude – France

Faced with these progressive disappearances, certain sites, on the other hand, were saved thanks to a growing awareness of heritage and memorial value. The Cité de Carcassonne almost suffered the same fate as Cluny. It was only after the demolition of the large barbican that a resident, Jean-Pierre Cros-Mayrevielle, sounded the alert.

Thanks to Prosper Mérimée, the city was

classified in 1840 among the first French historical monuments. The restorations carried out by Viollet-le-Duc starting in 1853, although open to interpretation, made it possible to preserve a unique medieval ensemble and make it a major tourist and economic hub, also evoking the border fluctuations between Spain and France, which today provide the bulk of its visitors.

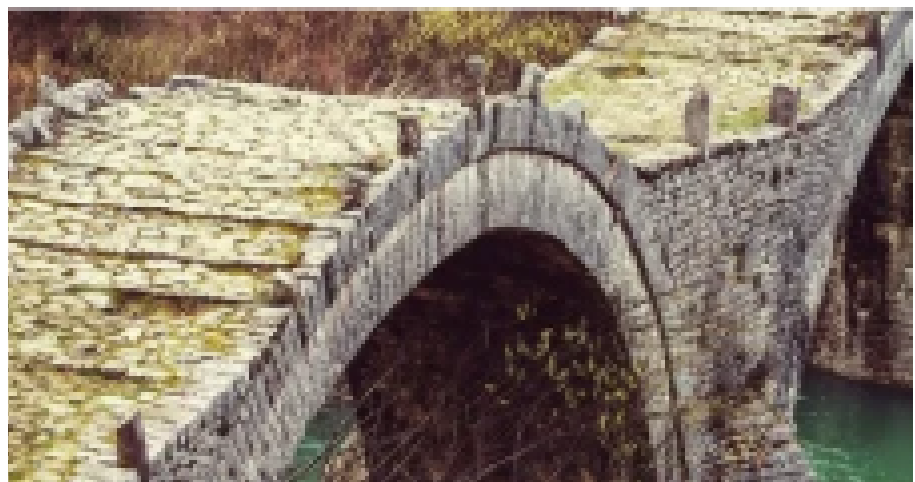
These examples illustrate a turning point in 19th-century France, which, like other countries, embarked on a commitment to stop the slow erasure of monumental heritage. This policy was later extended to more ordinary buildings, revealing that everyday architecture also deserved attention and rehabilitation—an evolution from the isolated protected building to architectural, urban, and landscape ensembles accompanied by regulations linking different codes of heritage, urban planning, environment, and construction.

It is in this context today that a heightened awareness of energy efficiency performance is added. Constructing or renovating a building requires fine life-cycle analyses from the outset: embodied energy contained in materials, environmental impact of their extraction, transport, installation, and recycling or reuse. It can prove more ecological to rehabilitate and use an old building than to build a new one, even a high-performance one. Demolishing means depriving oneself of the sum of energies already invested. This should in no way limit future creativity, which can graft itself onto existing structures through compatible usage programs.



Photograph Almatoya Architecture 12/08/2025 – Loire-et-Cher – Blois Post Office  
Work on the post office was pushed back to the second half of the 1950s. It was Georges Labro, architect of the Post Office, who designed the building as well as the landscaping of the public garden located south of it. View of the post office from Rue Gallois. Etude spéciale d'architecture par Charles Kaddouz et Jacques Pillard, 1943 (Blois Municipal Archives).

It is also worth considering more subtle forms of energy, such as the capacity of a place to provide well-being, comfort, and harmony to those who inhabit or visit it. For example, vernacular Mediterranean architecture effectively utilizes elements like color, orientation, and materials to moderate thermal gaps, achieving a balanced environment without the need to depend on modern technologies. This approach has been notably highlighted by the work conducted by the University of Marrakech, located in the South of the Kingdom, which emphasizes the importance of these traditional methods.



IN THE HILLS OF ARGOLIS, IN GREECE, LIES THE KAZARMA BRIDGE, WHICH IS A VESTIGE OF THE MYCENAEAN CIVILIZATION. IT IS THE OLDEST BRIDGE IN THE WORLD (OVER 3,300 YEARS OLD); THIS STRUCTURE REMAINS USABLE TO THIS DAY. - Source : <https://www.en-vols.com/styles/architecture/grece-pont-plus-ancien-monde/>

# THE ECEQ COMMISSION OF THE CGECI: A STRATEGIC FRAMEWORK FOR MOBILIZING THE IVORIAN PRIVATE SECTOR IN FAVOR OF ENERGY EFFICIENCY AND SUSTAINABLE DEVELOPMENT



**Mr. KOUADIO ÉDOUARD KOFFI**  
President of the Energy Sub-Commission  
Vice-President of the ECEQ Commission –  
CGECI

**As the energy transition emerges as a strategic imperative for the African continent, Côte d'Ivoire stands out as a committed player, driven by a strong dynamic between public authorities and the private sector. On the occasion of the 11th edition of the African Energy Efficiency Forum (RAEE), scheduled for May 12, 2026, in Casablanca, the General Confederation of Enterprises of Côte d'Ivoire (CGECI) will carry the voice of the Ivorian private sector through its Energy, Climate, Environment, and Quality Commission (ECEQ). A look back at the structuring role of this body and the concrete actions it leads to accelerate the energy transition of Ivorian businesses.**

## **Côte d'Ivoire in Casablanca: a significant presence.**

The African Energy Efficiency Forum constitutes, since its creation, one of the most strategic continental meetings for energy stakeholders. Bringing together public decision-makers, businesses, experts, and financial institutions, this event offers a unique platform for sharing experiences, dialogue, and cooperation around energy performance issues.

It is within this framework that the CGECI, the leading employers' organization in Côte d'Ivoire, will participate in the 2026 edition through representatives of its ECEQ Commission. This participation is part of an international visibility approach, but also and above all a firm determination to contribute to continental debates on energy, climate, and environmental challenges, highlighting initiatives and lessons learned from the Ivorian experience.

## **The ECEQ Commission: a technical body serving sustainable competitiveness**

Chaired by Mr. Mamadou DOUMBIA since March 7, 2023, the Energy, Climate, Environment, and Quality Commission (ECEQ) is one of the specialized technical commissions of the CGECI in supporting the private sector against the challenges of energy, climate, and environmental transition. Relying on 23 active members, it develops an integrated and cross-cutting approach through four specialized sub-commissions:

- The Energy Sub-commission, chaired by Mr. Édouard KOFFI, covers energy efficiency in the building, transport, and industry sectors, renewable energies, and factor costs;
- The Climate Sub-commission, chaired by Mr. AHOUA Brou (AIVdP), addresses climate issues, the Paris Agreement, "carbon" mechanisms, and the low-carbon transition;

- The Environment Sub-commission, chaired by Ms. Cyrianne AKAFFOU (AZITO O&M), leads issues related to plastics, waste, and chemical products;
- The QHS (Quality, Health, and Safety) Sub-commission, chaired by Mr. Stéphane AHUI (SIB), deals with occupational safety, mandatory standards, and labeling.

The fundamental missions of the ECEQ Commission cover a broad and complementary spectrum: sector monitoring on legislative, regulatory, and normative developments; evaluation of national programs regarding energy, climate, and environment; identification of financing and subsidy mechanisms to facilitate the integration of businesses into green sectors; and advocacy with national and international bodies for the implementation of incentive frameworks in favor of private initiatives.

## **Concrete actions to accelerate the energy transition of businesses**

The ECEQ Commission does not limit itself to an advisory role. It initiates, accompanies, and federates field actions that produce measurable results for Ivorian businesses.

In terms of energy efficiency, the CGECI, in partnership with the Business Support and Development Center (CADE) and German technical cooperation (GIZ) within the framework of the ProFERE II project, deployed a key business support program. In 2025, this program organized four training sessions benefiting 30 companies and trained 55 professionals in energy auditing practices. These actions resulted in 36 electricity bill analyses and 33 in-depth technical studies, offering companies concrete levers to optimize their consumption and reduce their costs.

On the financing side, the Commission contributed to promoting the SUNREF program, which mobilized 17.5 million euros — nearly 11.4 billion FCFA — dedicated to financing energy efficiency and renewable energy projects in partnership with local banks. This mechanism illustrates the private sector's ability to access green financing when structured and well-targeted.

Regarding self-generation and renewable energy, the Commission actively advocates to public authorities for simplifying the regulatory framework for solar self-generation, developing incentive mechanisms (tax and tariff), and promoting innovative business models such as PPAs (Power Purchase Agreements), energy leasing, and ESCOs (Energy Service Companies).

Electric mobility is also among the strategic projects led by the ECEQ Commission. Aware that the decarbonization of the Ivorian economy also involves transforming transport uses, the Commission advocates for establishing a dedicated regulatory framework for charging infrastructure, tax incentives for acquiring electric vehicles, and public-private partnerships in this domain.

### Côte d'Ivoire Facing the Energy Transition: A Strong National Ambition

The commitment of the Ivorian private sector is part of a favorable national context, marked by a proactive energy policy and formal climate commitments at the international level.

On the energy front, Côte d'Ivoire has set ambitious targets through its National Development Plan (PND) and its National Energy Policy, aiming in particular to increase the share of renewable energies to 45% of the national electricity mix by 2030, to develop large-scale solar and hydroelectric production, and to improve access to reliable, affordable, and clean energy for households and businesses. The country also benefits from its status as a regional electricity exporter, giving it a strategic energy hub position in West Africa.

On the climate front, Côte d'Ivoire has updated its Nationally Determined Contribution (NDC) under the Paris Agreement, committing to reducing its greenhouse gas emissions and strengthening its resilience against climate change impacts. These commitments require the mobilization of all economic actors, primarily the private sector, to integrate decarbonization requirements into their development strategies.

In this framework, public-private dialogue on energy and climate policies constitutes an essential pillar. The CGECI, through its ECEQ Commission, fully plays its advisory and proposal role by voicing corporate concerns to government bodies and contributing to the drafting of regulatory and incentive frameworks tailored to private sector realities.

### Casablanca 2026: An Opportunity for Cooperation and African Influence

CGECI's participation in the 11th edition of the African Energy Efficiency Forum represents much more than a simple presence at a continental event. It reflects the Confederation's determination to position the Ivorian private sector as a benchmark player in the African energy transition by sharing lessons from a rich national experience and innovative initiatives led by its ECEQ Commission.

In a context where Africa must simultaneously address the challenges of energy access, economic competitiveness, and climate responsibility, exchanges between employer organizations, public decision-makers, investors, and experts across the continent constitute a decisive lever for convergence and collective action. CGECI intends to contribute to this momentum by capitalizing on Ivorian achievements, forging strategic partnerships, and amplifying the message that the African private sector not only has the capacity, but also the willingness to fully engage in building a sustainable, resilient, and low-carbon economy.



**Energy efficiency is not a constraint. It is a lever for competitiveness, resilience, and sustainable growth. And this is precisely the message that the CGECI will bring to Casablanca**

**About CGECI** — The General Confederation of Enterprises of Côte d'Ivoire is the leading Ivorian employers' organization. It represents and defends the interests of the private sector, supports businesses in their development, and contributes to public-private dialogue on the country's major economic, social, and environmental policies.



# CARBON MARKET: MOROCCO AND NORWAY TAKE ACTION



**Mr. NACIF SAFOUANE**

Regional Carbon Market and  
Renewable Energy Lead, MENA,  
GGGI Morocco

**The Kingdom of Morocco takes a decisive step in its green finance strategy through the signing of a bilateral agreement with Oslo on May 5, 2025.**

On a large scale, renewable energies make it possible to avoid millions of tonnes of CO<sub>2</sub>. These avoided emissions have market value: this is the whole principle of the carbon market. A high-emitting country can finance the decarbonization of a developing country in exchange for carbon credits.

The principle dates back to the Kyoto Protocol in 1997. But for decades, the lack of common rules limited its reach: only a restricted number of developed countries were subject to binding commitments. The Paris Agreement, adopted in 2015 and entering into force in 2016, expanded the framework to all nations, and COP29 in Baku in November 2024 lifted the final regulatory bottlenecks, making the system fully operational. Morocco fully intends to take advantage of it.

## **The Morocco-Norway Bilateral Agreement, Finalized**

What was until now only a perspective is now a reality. On May 5 last year, Leila Benali, Minister of Energy Transition and Sustainable Development, and her Norwegian counterpart Andreas Bjelland Eriksen, Minister of Climate and Environment, signed a bilateral agreement implementing Article 6.2 of the Paris Agreement. The ceremony was held remotely, in the presence of the Ambassador of Morocco to Norway, Nabila Freidji, and the Ambassador of Norway to Morocco, Helge Seland. It concretely realizes the memorandum of understanding signed between the two Parties in December 2023 at COP28 in Dubai.

What Morocco yields to Norway: carbon accounting. What it keeps: electricity, infrastructure, jobs, competitiveness. Article 6.2 accelerates investments and finances the country's energy transition.

The financial allocation is substantial: \$100 million in carbon financing mobilized initially via the Norwegian NACA fund (Norwegian Article 6 Climate Action), with a total potential estimated at over \$600 million according to the project portfolio. The entire structure is tied to a result-based payment mechanism.

## **GBI, a Performance-Based Logic**

The Generation-Based Incentive (GBI) mechanism is at the heart of the system. Developed by the Global Green Growth Institute (GGGI) in partnership with the Moroccan Ministry of Energy Transition and Sustainable Development (MTEDD), it aims to deploy around 2 GW of additional renewable capacity over ten years, from 2026 to 2036, including battery storage solutions.

Its principle differs from a traditional subsidy: producers are remunerated only according to the electricity actually injected into the grid and emissions effectively avoided, independently verified. "No production, no payment."



This performance-based logic aims to secure financing while guaranteeing tangible results.

The GBI specifically targets projects deemed too risky or insufficiently profitable to attract private investors on their own. It fills a blind spot in the current system.

Generated emission reductions (approx. 10 million tonnes of CO<sub>2</sub>) will be transferred to Norway as ITMOs (Internationally Transferred Mitigation Outcomes, in French RATI: Résultats d'Atténuation Internationalement Transférables), in exchange for carbon financing paid to Morocco. Both countries win: Oslo advances toward its climate goals; Rabat accelerates its energy transition.



### A Long-Term Endeavor

This result is the fruit of work initiated back in 2019 through the DAPA program (Designing Article 6 Policy Approaches), jointly led by the MTEDD and the GGGI, and funded by the NACA fund. Its objective: to support Morocco in developing public policies and regulatory frameworks that accelerate its energy transition and its access to Article 6 market mechanisms.

This program made it possible to identify the eligible sector and design the necessary regulatory architecture. Two laws were selected as the foundation: Law 40-19 on renewable energies and Law 82-21 on self-generation. The GBI attaches itself to this framework as an incentive financing tool.

### A Lever to Bridge a Financial Gap

Furthermore, the challenge is above all financial. To reach the goal of 52% renewable energy by 2030 and the 53% greenhouse gas emission reduction targeted by 2035 in Morocco's NDC 3.0, the Kingdom must significantly accelerate the pace of its investments in the sector.

However, the gap between actual needs and mobilization capacity widens as deadlines approach. Traditional channels (public funding and traditional international donors) have shown their limits. They are no longer sufficient to maintain the set trajectory, either in volume or in speed of deployment. Thus, the GBI provides an answer to this challenge: monetizing avoided emissions to make otherwise unfinancable projects attractive.

**By activating one of the continent's first operational Article 6.2 agreements, the Kingdom cements its status among African carbon finance pioneers: a strong signal at a time when many states are still at the promise stage. The next steps outline the signing of the MOPA (Mitigation Outcome Purchasing Agreement) to officially launch the first carbon transactions between Rabat and Oslo.**

# STRUCTURING AFRICAN ENVIRONMENTAL MARKETS:

## THE AMBITION OF THE GREEN ASSETS CLUSTER



**The global energy transition is accompanied today by the emergence of new carbon, renewable electricity, and broader environmental asset markets. These mechanisms play a growing role in funding decarbonization, mobilizing green investments, and boosting the competitiveness of economies committed to the climate transition.**

For African countries, the challenge goes far beyond mere regulatory compliance: it is about structuring ecosystems capable of valorizing local renewable resources, attracting international financing, supporting low-carbon industrialization, and strengthening economic resilience against global value chain transformations.

Morocco possesses significant assets to position itself as a regional reference hub in this domain: a rapidly transitioning energy mix, internationally recognized renewable potential, strategic proximity to European markets, and a growing determination to structure credible mechanisms around environmental assets.

It is within this momentum that the Green Assets Cluster was launched in July 2025, initiated by Casablanca Finance City Authority (CFCA) in partnership with Caisse de Dépôt et de Gestion (CDG). It aims to unite public and private actors committed to developing carbon and environmental asset markets in Morocco and across Africa.

Conceived as a neutral and collaborative platform, the Cluster brings together companies, financial institutions, project developers, industrialists, certification bodies, technology players, and academic institutions around a shared ambition: contributing to the emergence of a credible, structured ecosystem aligned with international standards.

While carbon credits represent one of the most visible segments of this new climate economy, environmental markets in reality cover a much broader spectrum of instruments. Among them are International Renewable Energy Certificates (I-RECs), which allow tracing and certifying the renewable origin of electricity consumed by a company. These instruments play a growing role in corporate ESG commitments and Net Zero trajectories.

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**The Green Assets Cluster aims to support the development of these new markets in Morocco through several priority axes:**

1

Structure a public-private dialogue around environmental markets and climate policies;

2

Foster synergies and collaboration opportunities among value chain actors;

3

Build capacity for companies and institutions through training, workshops, and awareness initiatives;

4

Produce benchmark analyses and content on carbon and environmental asset markets;

5

Connect Moroccan actors to international standards and dynamics.

**Through this initiative, the ambition is clear: contribute to making Morocco a regional reference hub for carbon and environmental asset markets, driving economic competitiveness, innovation, and low-carbon transition across the continent. The Cluster is now open to all public and private actors wishing to actively contribute to this collective momentum.**



TAMWILCOM  
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## « Green Invest »

# FINANCING ECO-RESPONSIBLE INVESTMENTS

« **Green Invest** »: a joint financing mechanism with banks, dedicated to SMEs operating in the green economy, designed to finance the acquisition of tangible and intangible assets, as well as necessary equipment and technical installations.



Building the future  
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**European Bank**  
for Reconstruction and Development



# We invest in changing lives

The EBRD works across three continents to support the transition to successful market economies.

Our focus is on delivering prosperity by enabling a well-run and sustainable private sector.

We do this with our unique business model, combining financing, advice and policy reform.

€210 billion  
Invested since 1991

7,400 Projects  
and counting