Carbon Credits Insights Session

MA Insights Session

19 November 2025

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from the British people

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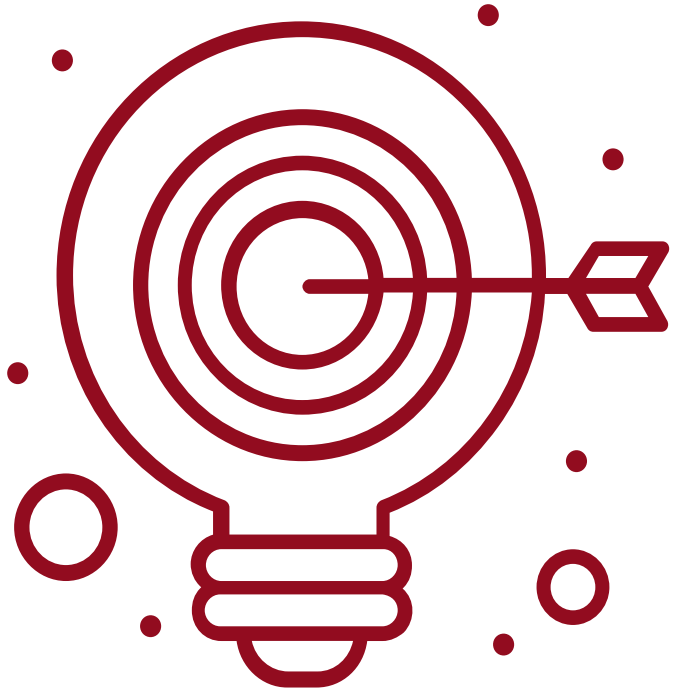
Session Objectives



1. Demystify the Carbon and Climate Finance Landscape
2. Clarify the Relevance of Carbon Finance for African Manufacturing
3. Assess When and How Carbon Credits Make Business Sense
4. Surface Lessons and Barriers from MA's Portfolio
5. Identify Capacity and Policy Priorities for FCDO Programmes
6. Define Next Steps for Programme Integration

Insight Session Experts

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Burn

The State of Climate and Carbon Finance

Overview of Climate Finance Landscape

In 2025, corporate demand trends are primarily driving a "flight to quality" in carbon markets, characterized by a growing premium for high-integrity credits and a shift towards long-term supply agreements. This trend is driven by stricter scrutiny of net-zero claims, evolving regulatory frameworks, and a desire to mitigate greenwashing risks.

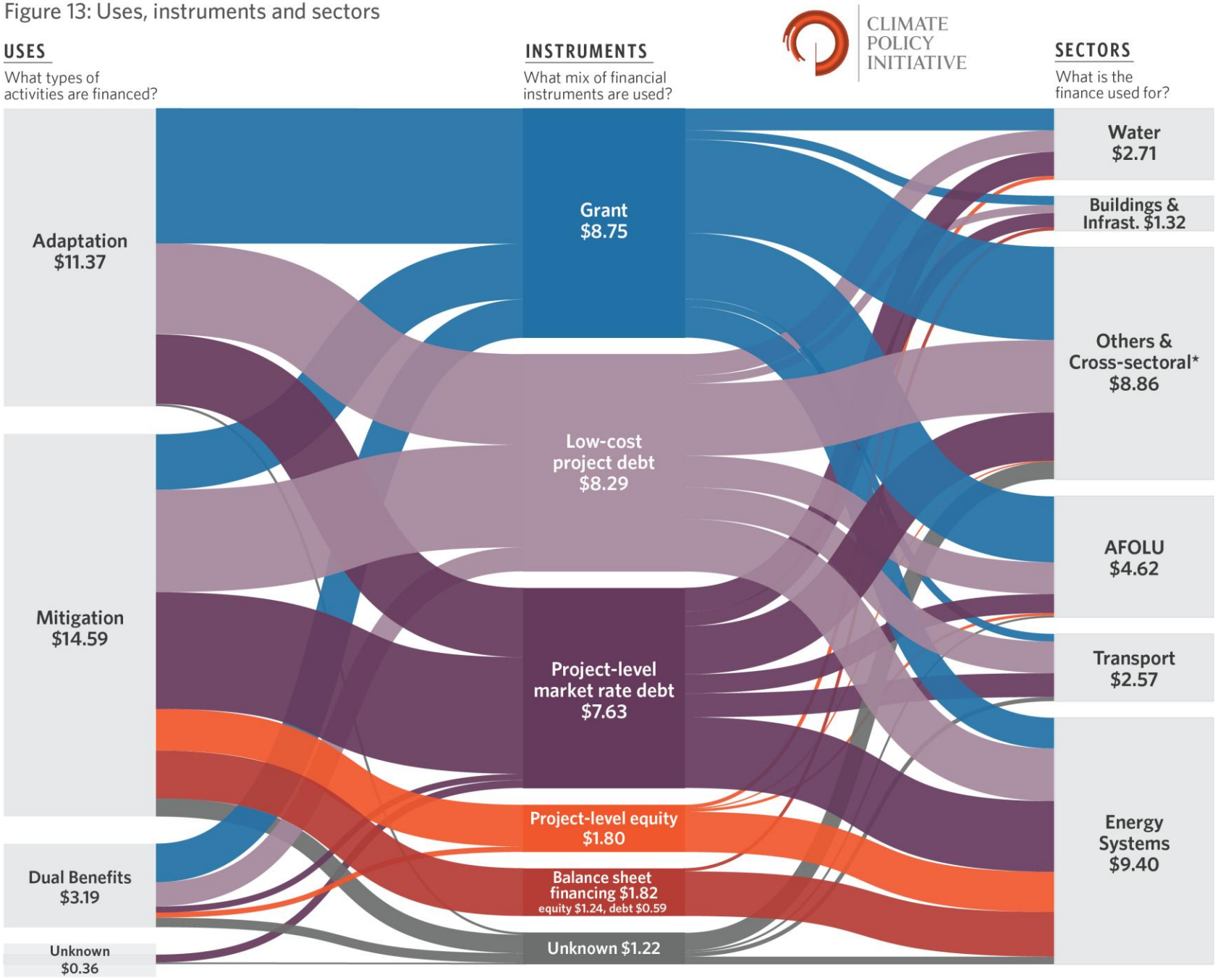
Key Effects of Corporate Demand in 2025

- **Premium on Quality and Integrity:** Corporations are increasingly selective, demanding credits that align with independent standards like the Integrity Council for the Voluntary Carbon Market's (ICVCM) Core Carbon Principles (CCPs). This has led to a clear price premium for credits from verified, high-integrity projects, particularly nature-based removals (NBR) and technology-based solutions (CDR
- **Shift from Avoidance to Removal Credits:** There is a notable shift in demand towards carbon dioxide removal (CDR) projects (e.g., Direct Air Capture (DAC), biochar), which offer greater permanence and durability than traditional avoidance credits (e.g., some renewable energy projects), essential for meeting long-term net-zero alignment.
- **Increased Use of Long-Term Offtake Agreements:** To secure a reliable supply of high-quality credits and manage price volatility, buyers are moving away from spot market purchases to multi-year offtake agreements. This provides developers with the revenue certainty needed to launch capital-intensive projects.
- **Sector-Specific Shifts:** Purchasing patterns vary by industry. Energy and utility firms remain dominant buyers, while professional services firms have accelerated their use of cookstove project credits. Demand for renewable energy credits has continued to decline in most sectors, with transportation and logistics firms as an exception.
- **Greater Transparency and Due Diligence:** Corporate buyers are conducting more rigorous and time-intensive due diligence on projects. This demand for transparency is driving the adoption of new technologies like blockchain for verification and platforms that offer robust data and independent ratings.
- **Convergence with Compliance Markets:** Corporate strategies are increasingly integrating with compliance mechanisms, such as the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). Credits eligible for use in regulatory compliance are in high demand and command higher prices due to their assured standards and alignment.

The State of Climate and Carbon Finance

Understanding How Climate Finance is Allocated Across Uses, Instruments, and Sectors

Figure 13: Uses, instruments and sectors



The State of Climate and Carbon Finance

Impact on Manufacturing in Africa

Corporate demand in 2025 is creating a more mature, sophisticated, and discerning market that prioritizes verifiable, impactful projects over cheap, potentially low-quality alternatives. In 2025, carbon markets have a dual effect on African manufacturing: they present significant opportunities for green investment and new revenue streams but also pose challenges through increased operational costs and the potential for reduced exports due to international regulations like the EU's Carbon Border Adjustment Mechanism (CBAM).

Opportunities:

- Access to climate finance
- Competitive advantage in green production
- Job creation and economic growth
- Development of local expertise

Risks:

- Trade barriers and export impacts
- Increased operating costs
- Regulatory uncertainties
- Export value

African Response:

African nations are developing unified approaches and national policies, such as the African Union Action Plan on Carbon Markets (AAPCM) and Kenya's regulatory updates, to better leverage carbon markets for their industrial and development goals.

Carbon Credit Market Developments

Global and African Trends in Carbon and Climate Finance

Voluntary key trends in carbon and climate finance in 2025 include a significant decrease in traditional development aid to Africa, the growing importance of carbon markets for generating finance, and increased private sector investment in African climate projects, particularly in renewables, agriculture, and forestry. Globally, carbon pricing is expanding, covering about 28% of emissions and mobilizing over $100 billion in revenue in 2024, but adaptation finance remains critically underfunded despite increasing commitments.

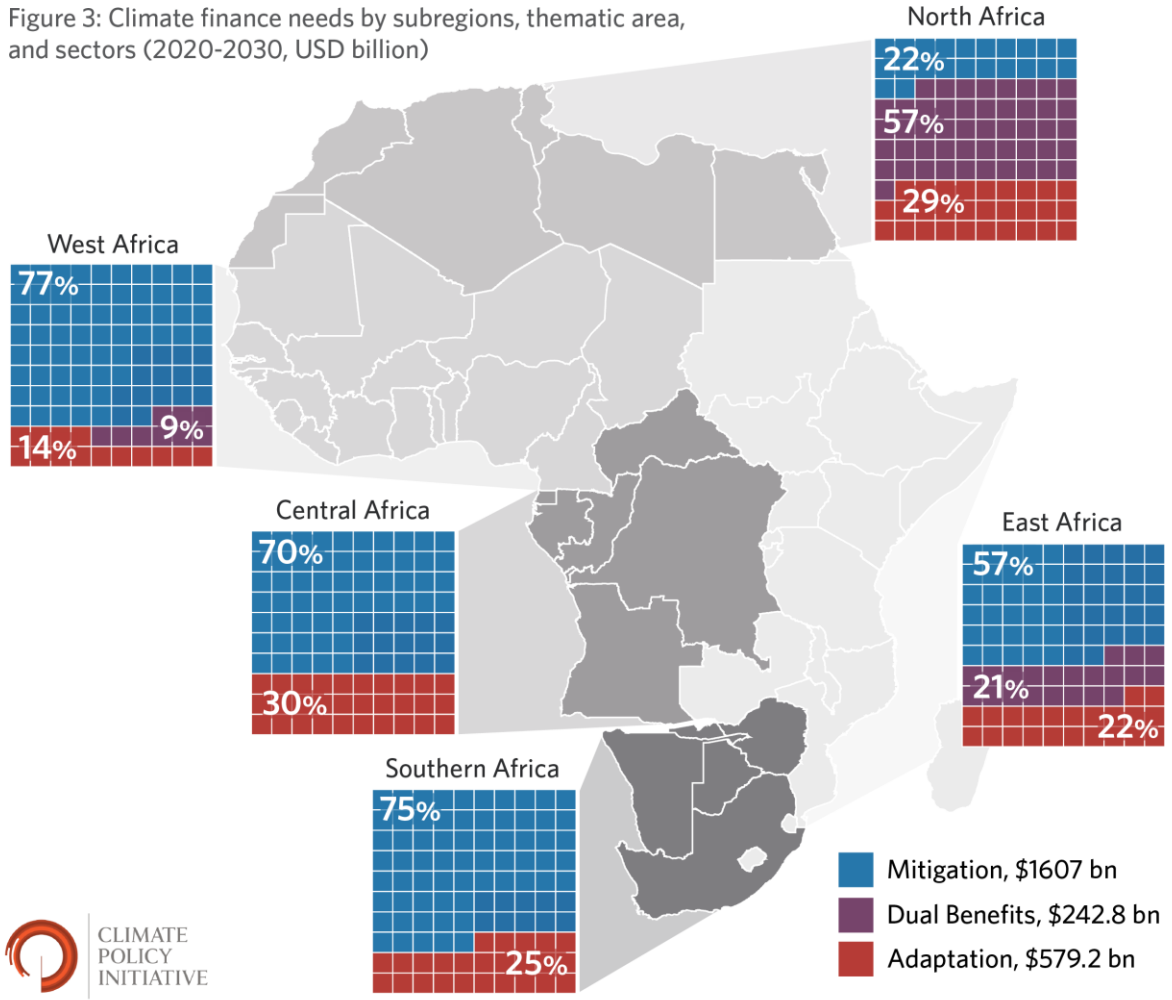
GLOBAL Trends

- Coverage of carbon pricing (28%) of global emissions according to the World Bank
- Underfunding of adaptation finance – but this sector of carbon financing is growing, yet, significant gaps remain
- Shifting geopolitical landscape – focus off African and more toward rebuilding and war

AFRICAN Trends

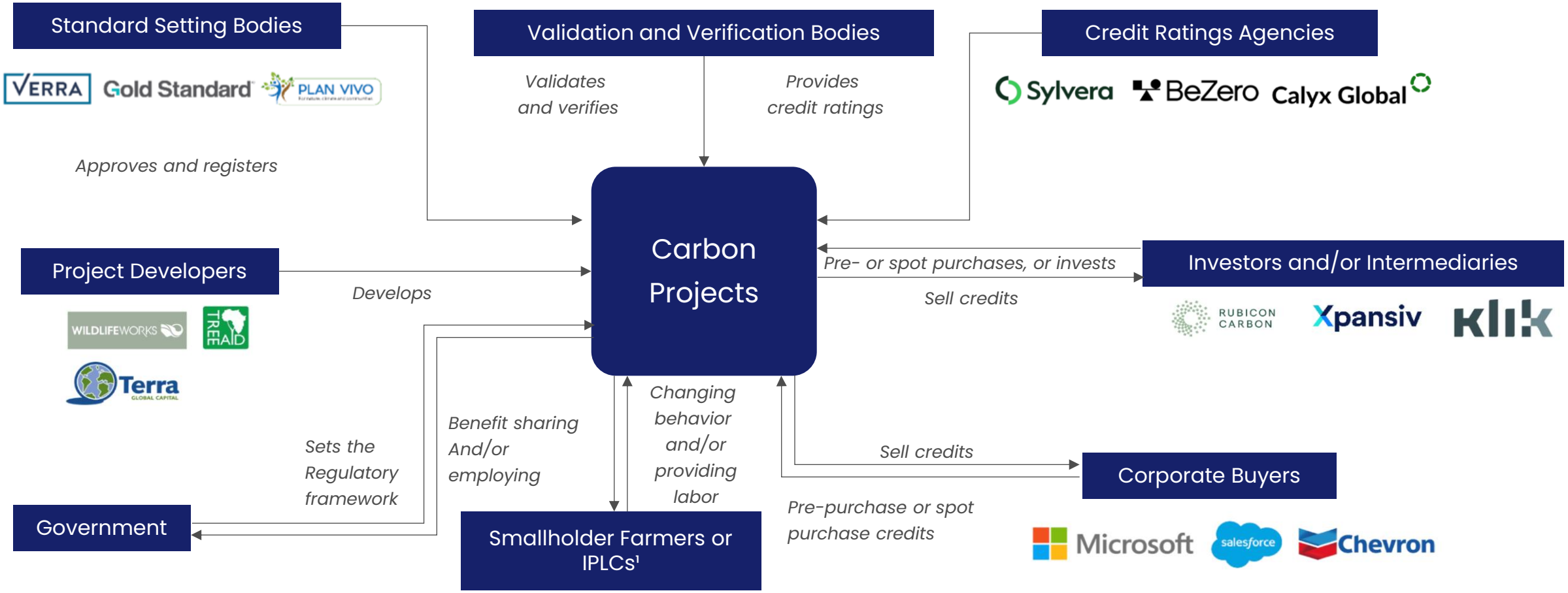
- Growth of carbon markets – thus this webinar
- New investors – change in investment demographics
- Government interest in attracting new 'greener' investors
- Challenges in market liquidity remain
- Challenges around data

Figure 3: Climate finance needs by subregions, thematic area, and sectors (2020-2030, USD billion)



Carbon Credit Ecosystem

Carbon Credit Journey Across Markets



Manufacturing Africa's Role and Lessons

MA's Approach to Climate and Carbon Finance

Manufacturing Africa (MA) integrates climate and environment (C&E) considerations across all its technical assistance (TA) and transaction facilitation (TF) support. Guided by the C&E Mainstreaming Action Plan and aligned with IFC Performance Standards, the Equator Principles, and host country NDCs, MA's approach is to go beyond compliance—embedding climate-positive practices that enhance investment readiness and resilience.

The programme supports manufacturers to identify:

- **Risks** – such as exposure to carbon-intensive inputs, water or energy inefficiencies, and potential CBAM-related trade barriers.
- **Opportunities** – through low-carbon innovation, circular economy models, and access to emerging carbon finance mechanisms.

This dual focus ensures MA-supported firms are both ESG-compliant and climate-competitive, helping unlock blended finance and improve FDI attractiveness.

How MA Supports Climate-Positive Manufacturing

Support Area	Example Interventions	Expected Outcome / ICF Alignment
Energy efficiency and renewable integration	Energy audits, process optimization, solar or biomass retrofits in food, plastics, and cement sectors	Reduced GHG emissions and operating costs; contributes to ICF KPI 6 (GHG emissions reduced or avoided) and KPI 7 (clean-energy capacity installed)
Waste valorisation and circularity	Conversion of production by-products (e.g., husks, sawdust, organic residues) into biomass fuel or biochar	Creation of new revenue streams and potential carbon credits; supports ICF KPI 6 through emission reductions and KPI 7 through renewable-energy generation
Climate risk and resource management	Development of environmental management systems, water stewardship plans, sustainable procurement, and low-carbon sourcing policies	Improved operational resilience, compliance with investor ESG standards, and enhanced access to climate finance; supports ICF KPI 2 (clean-energy access) and KPI 6

Manufacturing Africa's Role and Lessons

Lessons from the Portfolio

Manufacturing Africa's engagement across diverse industrial sectors has generated valuable insights on the readiness and positioning of African manufacturers within the emerging carbon economy.

1. Limited Direct Participation in Carbon Markets

Most MA-supported manufacturers are not core players in carbon markets. Their production models are primarily geared towards goods manufacturing rather than emissions trading or carbon-credit generation. While several companies engage in low-carbon activities (e.g., renewable energy use, energy efficiency, or waste valorisation), few have developed quantified, verifiable methodologies that enable participation in voluntary or compliance carbon markets.

•Many manufacturers view carbon finance as a secondary benefit, not a primary revenue driver.

•There remains a knowledge and capacity gap on how to navigate methodologies, verification standards, and registry requirements.

2. Profitability Potential Depends on Project Type

The previous webinar and follow-up discussions revealed that profitability in carbon markets is closely tied to project type, scale, and additionality:

High-Profit Potential Projects:

- Energy access and clean cooking technologies (e.g., BURN) with measurable household-level impact and scalable distribution.
- Biochar, waste-to-energy, and renewable energy mini-grids, which generate both direct GHG reductions and co-benefits (soil health, productivity, energy access).
- Refrigeration and cooling innovations (e.g., Koolboks) that integrate solar power and displace diesel or grid emissions.

Lower-Profit or High-Risk Projects:

- Industrial retrofits with high verification costs relative to carbon yield.
- Projects dependent on future policy frameworks or unstable carbon prices.

Manufacturing Africa's Role and Lessons

Lessons from the Portfolio

3. Strategic Fit Matters — Not Every Business Should Invest

MA has received several questions from beneficiary companies on whether to invest directly in carbon-credit projects or pursue partnerships. The key takeaway from market experience is that if carbon finance is not core to the business model, redirecting operational capital into carbon projects can create strategic and liquidity risks:

- It may divert funds from core manufacturing efficiency improvements or expansion.
- Verification timelines and market price volatility make returns uncertain.
- The opportunity cost is often higher than the carbon-revenue potential for small to mid-sized firms.

Instead, manufacturers are better positioned to:

- Integrate climate co-benefits within their production systems (energy efficiency, circularity).
- Partner with specialised developers who can aggregate carbon assets at scale.

4. Gaps Identified from Previous Webinar

The earlier Carbon Credits Insights Session and follow-up discussions with MA advisors revealed several recurring gaps:

- **Understanding market mechanisms:** Limited clarity on how voluntary and compliance markets differ, eligibility requirements, and access pathways.
- **Measurement, Reporting and Verification (MRV):** Limited capacity to establish baselines or design credible monitoring systems; data gaps hinder quantification of emission reductions.
- **Transaction costs:** High upfront verification and registry costs discourage participation by smaller firms; few understand aggregation or partnership models to share costs.
- **Policy uncertainty:** Fragmented or evolving national carbon frameworks reduce investor confidence and complicate NDC alignment.
- **Pipeline quality and strategic fit:** Few "investment-ready" carbon projects exist. Manufacturers often ask whether to invest directly in carbon projects; experts caution that if not core to the business model, diverting capital from operations introduces liquidity and strategic risks.
- **Advisor feedback:** MA and FCDO teams noted strong interest but limited in-country experience—most country teams are still in "learning mode." Future sessions should focus on practical integration, MRV readiness, ecosystem mapping, and clear guidance on when carbon credits make business sense.

Manufacturing Africa's Role and Lessons

Key Takeaways and Emerging Lessons for MA and FCDO

Foundational readiness:

- MA's strength lies in building carbon-market readiness rather than direct trading. The priority is strengthening literacy on market structures, pricing trends, and verification requirements.
- Develop a Carbon Readiness Toolkit with MRV templates, cost benchmarks, and methodology guidance.
- Equip delivery teams to help companies integrate emission-reduction systems early in operations.

Strategic positioning:

- For most manufacturers, carbon finance should remain complementary, not core.
- Diverting capital from core operations to carbon projects can strain liquidity and focus.
- Firms should instead embed energy efficiency, renewables, and waste valorisation to enhance competitiveness and create future credit potential.

Programme synergies and partnerships:

- Work with FSD Africa, DFIs, and private investors to unlock blended-finance opportunities.
- Facilitate cross-country learning between firms like BURN, Biologicals, and Koolboks.
- Build an enabling ecosystem by linking manufacturers with registries, verifiers, and aggregators.

Policy alignment:

- Leverage Kenya's Carbon Market Regulations and the AU's AAPCM to guide industrial participation and attract investors.

Integration with ICF objectives:

- Carbon-finance activities reinforce ICF KPIs 2, 6, and 7—advancing clean-energy access, GHG reduction, and installed clean-energy capacity across MA-supported deals.

Future focus:

- Standardise carbon-readiness tools across sectors.
- Pilot aggregated or sectoral models (e.g., biochar, waste-to-energy).
- Embed capacity-building on MRV and pricing in future TAs.
- Anchor carbon initiatives in core business logic to ensure operational and financial sustainability.

Case Study – Business Perspective

Case Study: BURN Manufacturing

+6 million units sold

ecoa® by burn

BURN Manufacturing & Manufacturing Africa

www.burnstoves.com

*"BURN has the highest clean cooking revenues, and total revenues, of any company"
Clean Cooking Alliance: Industry Snapshot 2021

The World's Leading Clean Cooking Company

6.3M
stoves manufactured & distributed across Africa

240K
stoves produced/ month

3,500
employees
50% are women

ISO 9001 certified
ISO 14001 certified

ecoa® by burn

A Vertically Integrated Carbon Project Developer

Product Design

+45-person design team

Manufacturing

+450K per month capacity

Distribution

+20 country sales presence

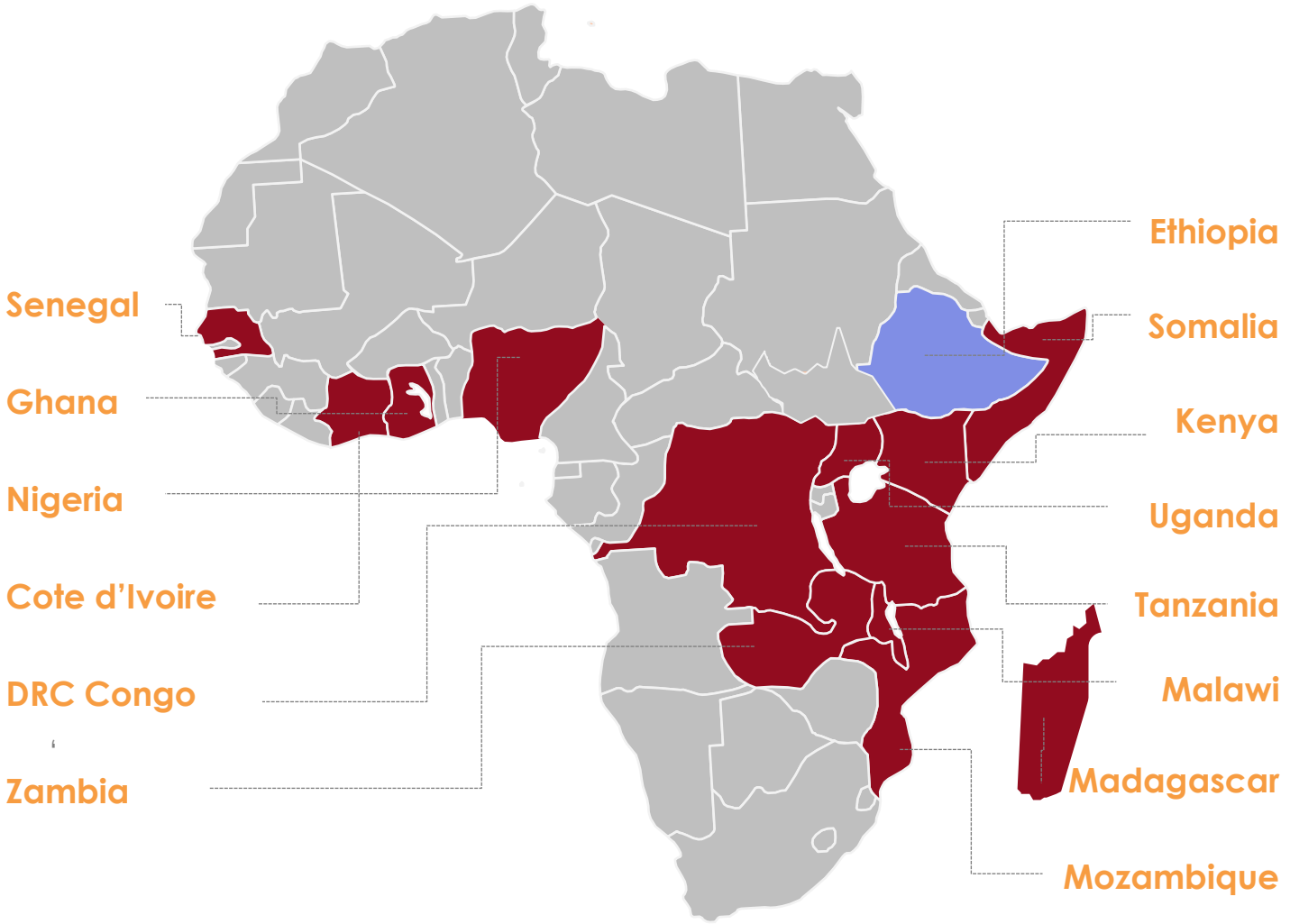
Monitoring, Issuance & Sale of Credits

+9.5M carbon credits issued

CARBON PROJECTS IN 14 COUNTRIES

BURN's home delivery model brings clean cooking direct to homes:

- 1,472 sales agents across the continent
- 87 after-sales stations
- Local clean cooking education



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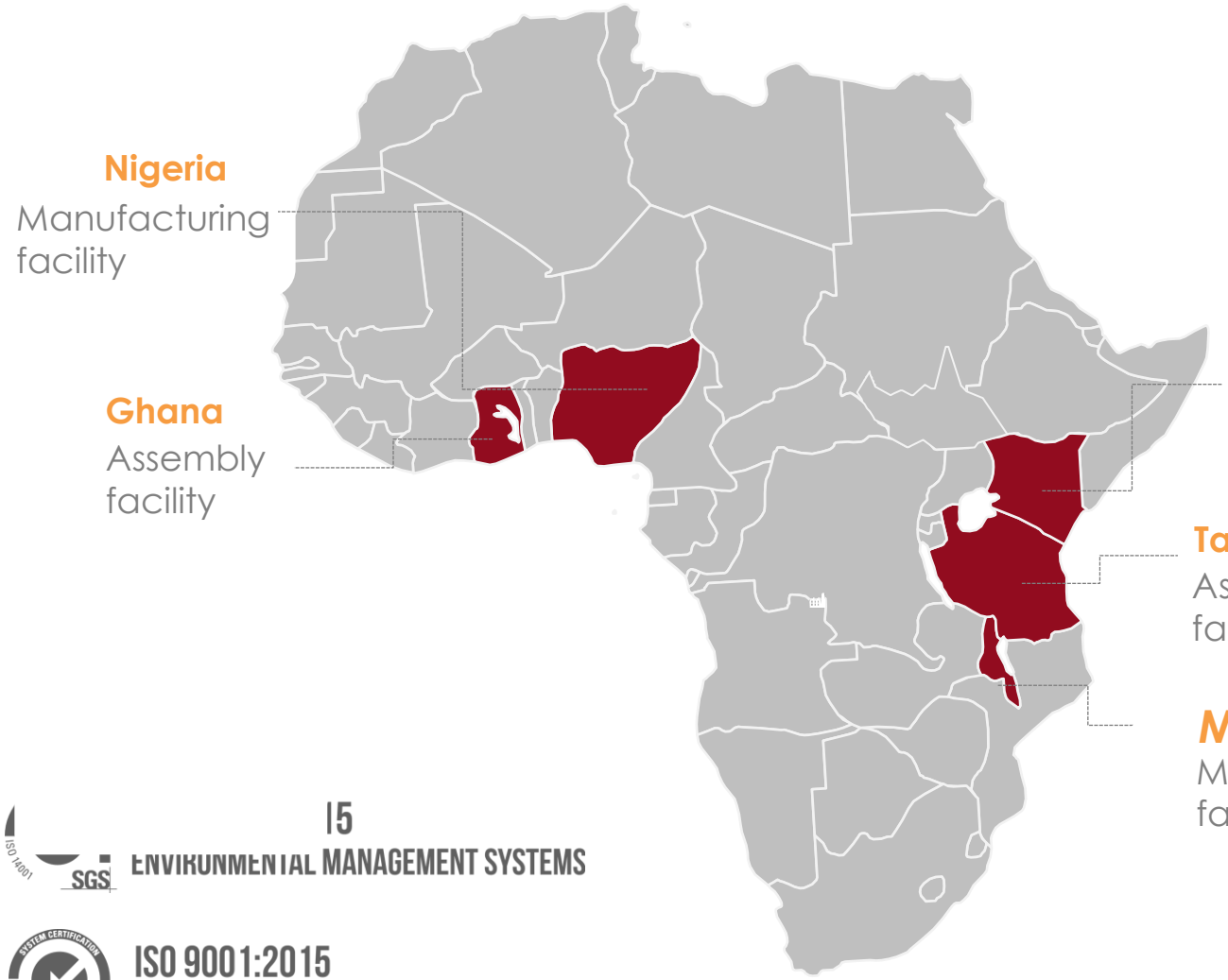
MANUFACTURING LOCALLY TO CREATE JOBS

BURN has built manufacturing and assembly facilities across the continent to benefit the community through:

- Community training & jobs
- Skills development and technological transfer



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ENVIRONMENTAL MANAGEMENT SYSTEMS

ISO 9001:2015
QUALITY MANAGEMENT SYSTEMS

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Our Products

ecoa electric

ecoa cookware

ecoa char plus

ecoa grill

ecoa wood

ecoa turbo

ecoa gas

ecoa ethanol

ecoa pro 200

Distributing the **world's best stoves**…

…to **low-income** families

CLOSING THE FUNDING GAP:

To meet SDG7 by 2030, the world needs **$150 billion annually**

… so far **$130 million** is committed

So far, carbon finance is the **only funding stream** unlocking impact at scale

Carbon Project Development

- Over 9M Gold Standard carbon credits issued
- Over $60M deployed and delivered to customers as price discounts across 10 countries

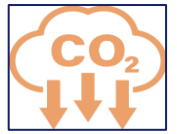
HOW DO BURN STOVES GENERATE CARBON CREDITS?

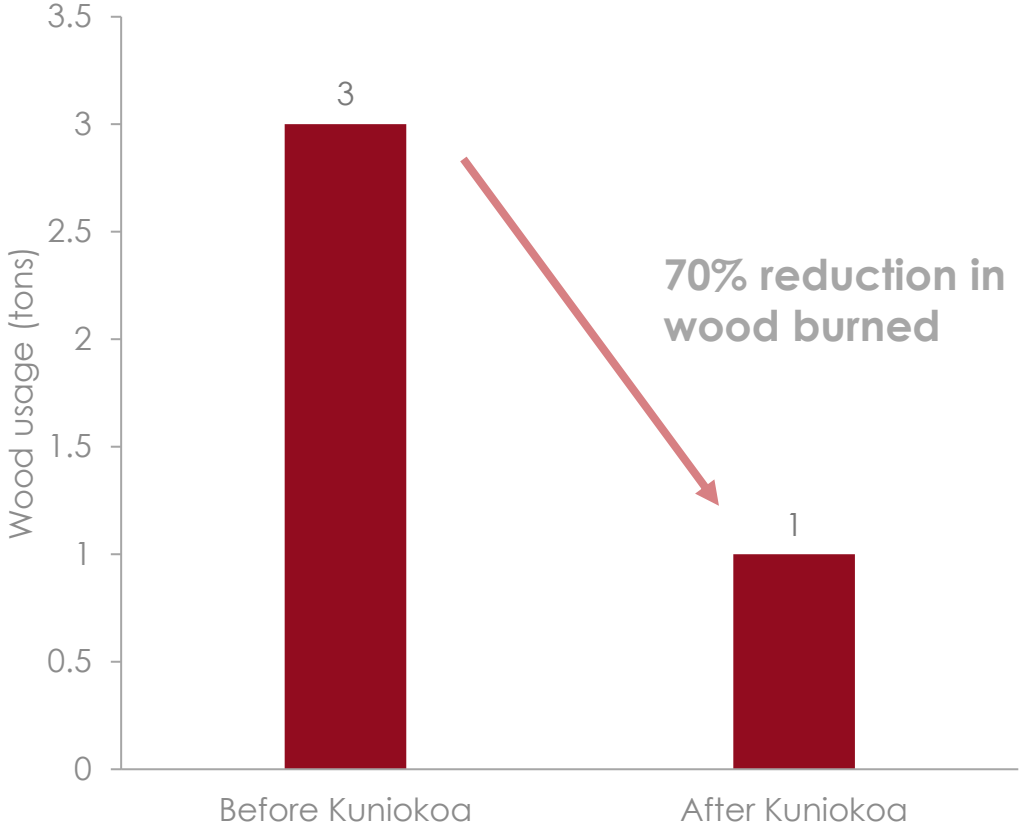
Our highly-efficient stoves **reduce fuel consumption**

We calculate the **tons of wood saved**, and this is converted into tons of CO_{2e}

1-2 tons of Carbon (CO_2) per stove per year

Inefficient Cookstove → **BURN Cookstove** = **Reduced CO_2**





70% reduction in wood burned → A '**carbon credit**' represents one ton of carbon emissions avoided

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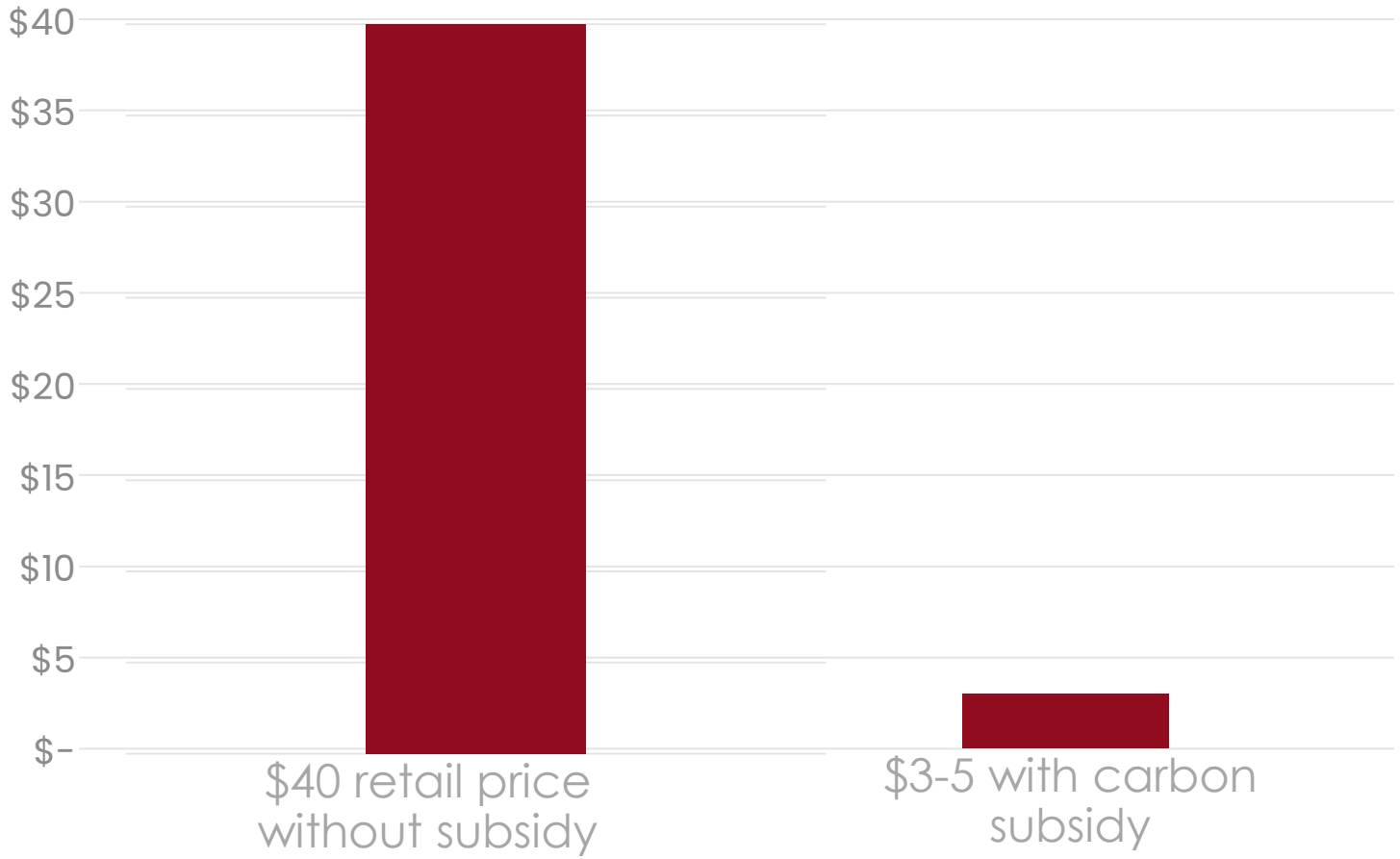
Carbon financing is essential to bring clean cooking to rural households (wood)



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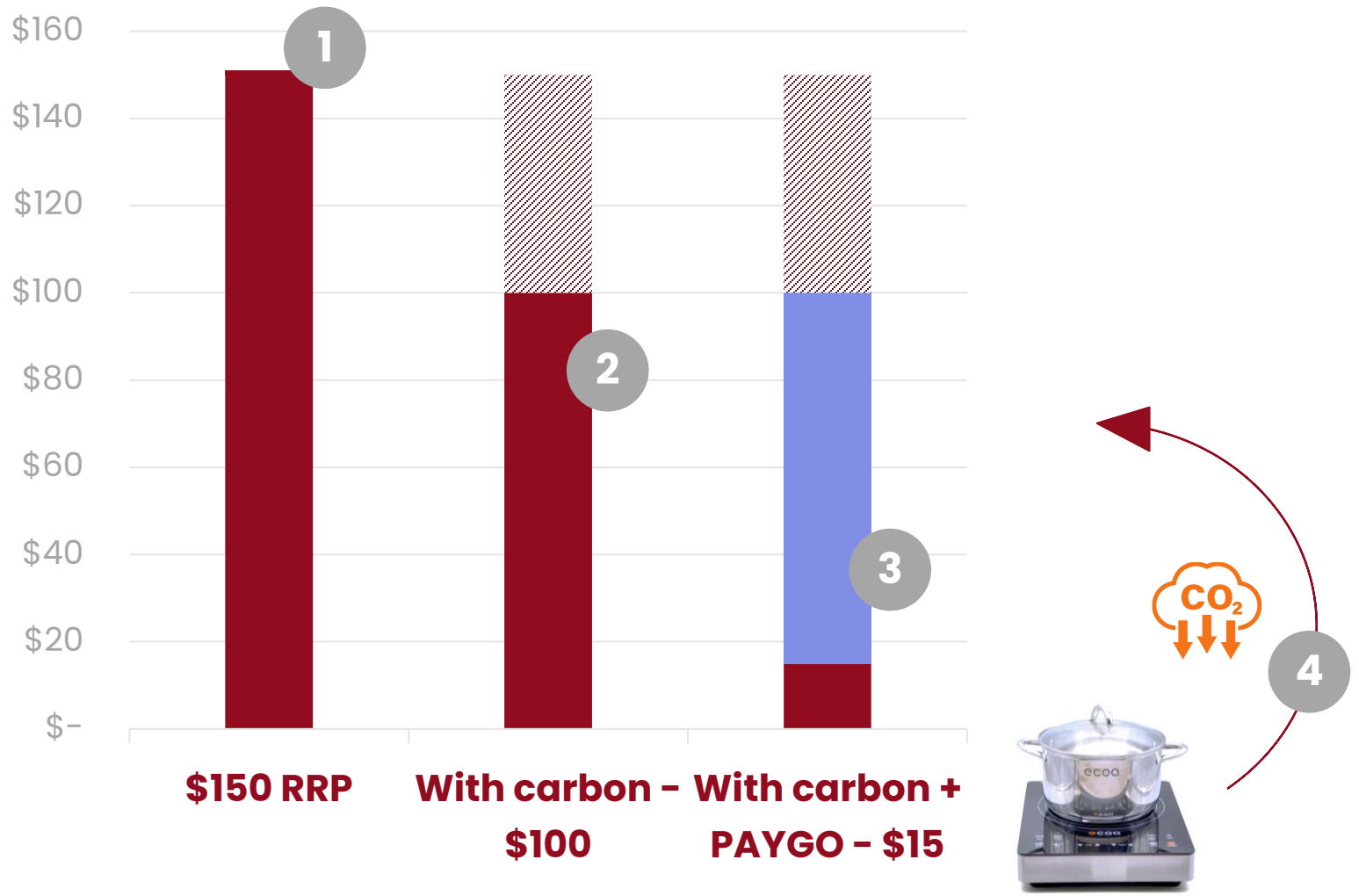
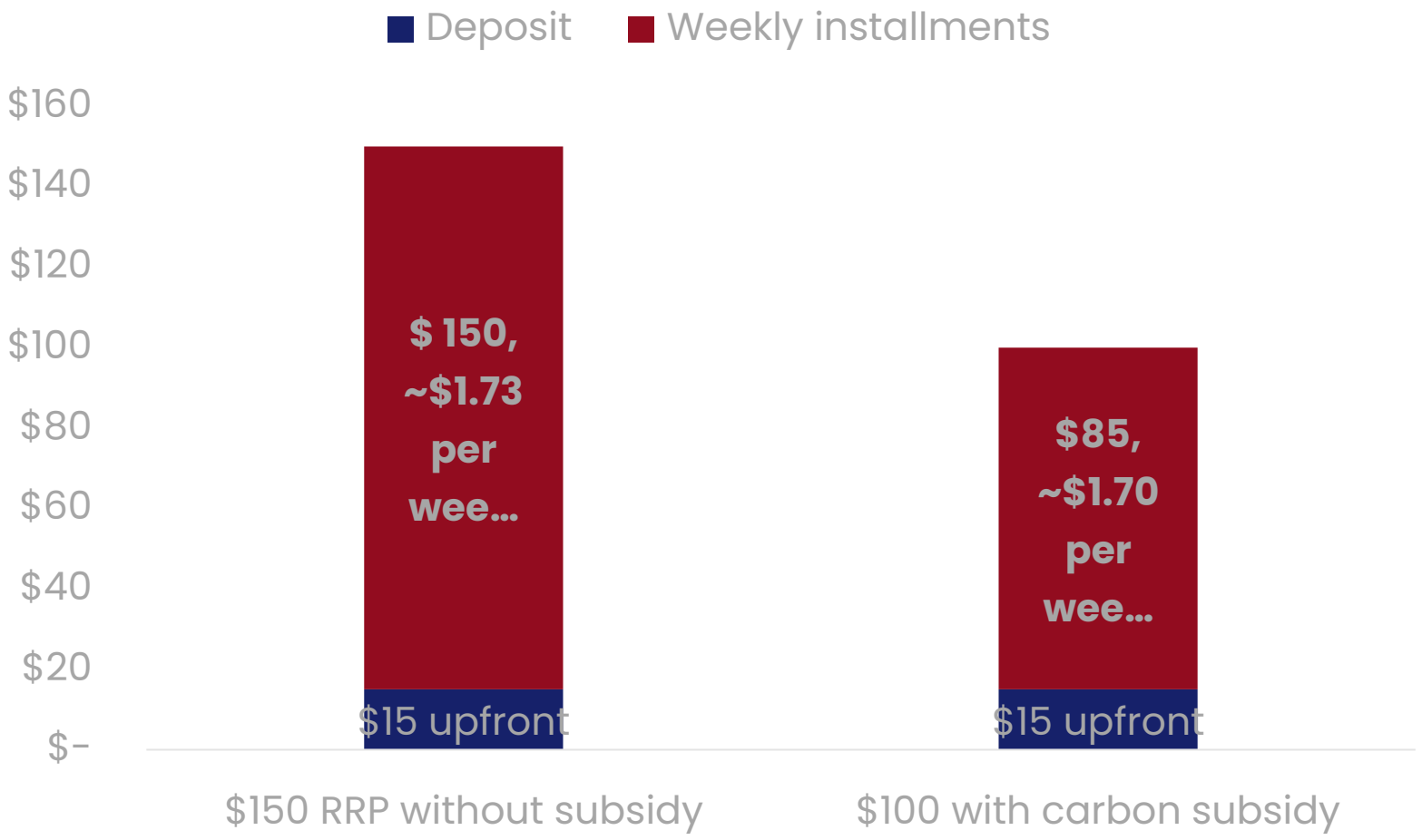
ecoa by burn

HOW CARBON FINANCE WORKS

1. BURN designs, produces, and distributes high quality stoves **~$150**
2. Carbon investors give up-front funds to reduce stove costs to **~$100**
3. "Pay as you cook" financing reduces the upfront cost to **~$15**
4. Families use their stoves, generating carbon credits; revenues from ITMOs transferred repay investors and scale impact



Carbon + PAYGO financing enables clean electric cooking for urban households



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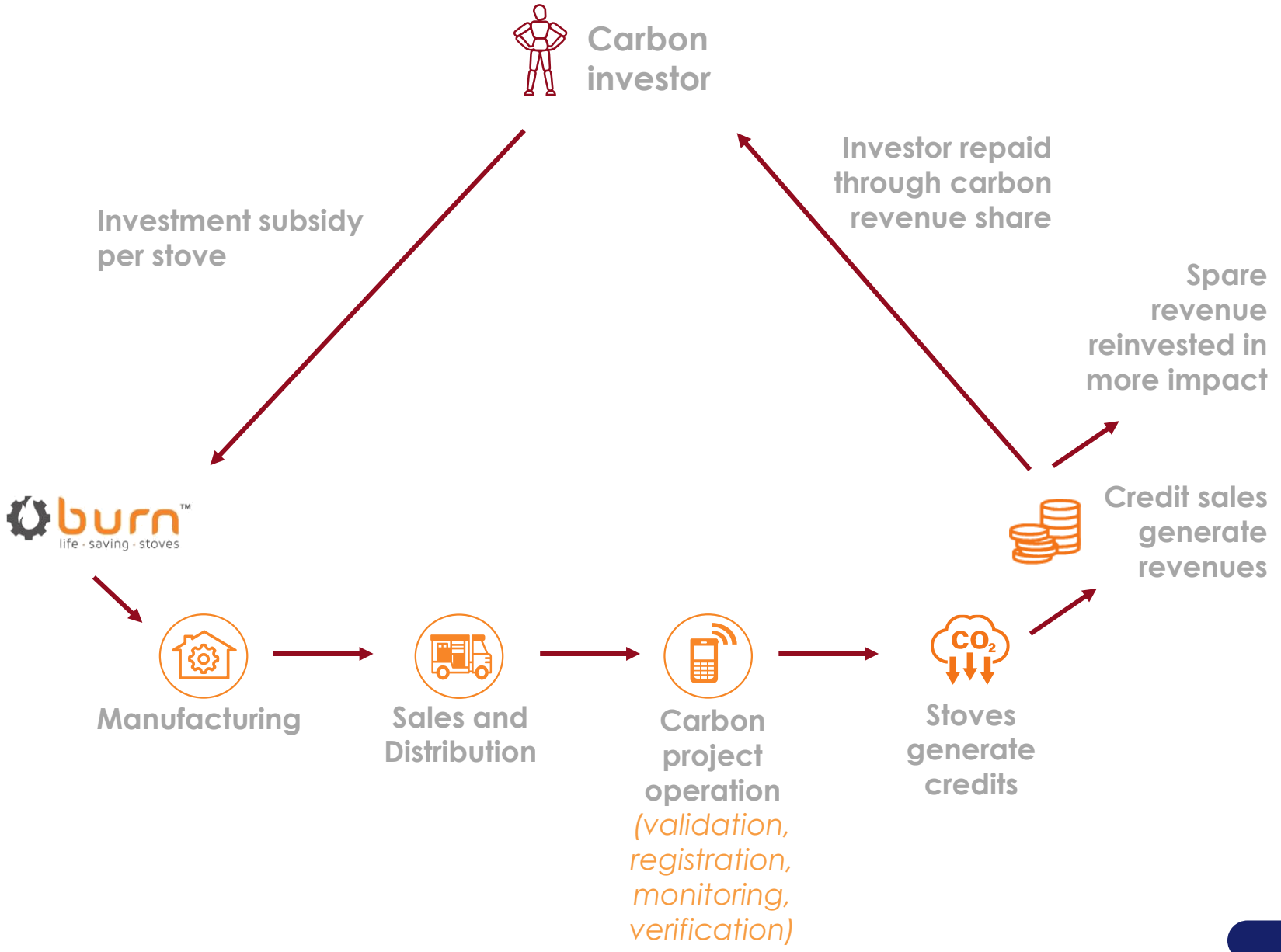
TYPICAL CARBON INVESTMENT STRUCTURE:

Up-front carbon investment is **repaid through carbon credit sales**

With authorized credits commanding **higher prices, and better liquidity** investors now need certainty that if they invest, they will **definitely get an LOA**

They require a **firm, multi-year commitment from government** to comply with UNFCCC reporting requirements



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BURN leverages multiple financing streams

These include:

Carbon Project Finance	Grants: Results Based Finance	Other Grants: Catalytic, Milestone Based	Debt	Receivables Financing
Over $70M raised	e.g. NEFCO, UNCDF, AECF	Innovate UK, CCA, Odyssey Energy, AfDB, CLASP	$10M Green Bond for Capex	$5M EIB for PAYGO

Recommendations for Manufacturing Companies

Carbon is risky…

High risk markets with long repayment terms

Increasingly reliant on government authorization & emission targets (e.g. NDCs)

Ensure manufacturing business is not fully exposed to carbon – consider separating projects

Carbon is hard…

Complex project design & monitoring requirements

Heightened scrutiny has led to tighter rules and lower crediting

If new, maybe partner with experienced carbon players

BUT, Carbon drives scale

For BURN, carbon subsidies are a major driver of growth

Accelerating adoption from low-income communities

Not a magic money tree, but helpful funding in a mixed portfolio

Any Questions?

Discussion & Q&A

Discussion Prompts

1. What role can carbon credits realistically play in advancing FCDO's *growth*, *just transition*, and *climate* objectives?
2. How can we differentiate approaches across Low-Income Countries (LICs), Middle-Income Countries (MICs), and Fragile, Conflict-Affected, and Vulnerable (FCV) contexts?
3. What capacity gaps both within FCDO and in partner institutions limit delivery, and how might we address them?
4. What opportunities exist to position the UK (via FCDO/MA) as a regional convenor or knowledge broker on industrial carbon finance?
5. Where are the biggest knowledge or skills gaps within programme teams and beneficiary firms?
6. How can MA and FCDO strengthen carbon literacy without over-engineering project delivery?
7. What are practical next steps to integrate carbon readiness into TA and TF support packages?

Thank you