Financial Mechanisms for Energy Efficiency in Buildings (FinMech4EEB) Manual

A guidance Manual for EEB Practitioners – part of the FinMech4EEB Toolkit

November 2026



PEEB Cool is funded by

GREEN CLIMATE FUND · AFD Agence Française de Développement · Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety · IKI International Climate Initiative · FEM Fonds Français pour l'Environnement Mondial

PEEB Cool is implemented by

AFD Agence Française de Développement · giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

PEEB PARTNERSHIP FOR ENERGY EFFICIENCY IN BUILDINGS

Financial Mechanisms for Energy Efficiency in Buildings (FinMech4EEB) Toolkit

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Acknowledgements

The authors thank María Fernanda Aguirre Bustos (Executive Director, Chile Green Building Council) for the peer review and valuable inputs on Ethical Banking and ESCOs.

About PEEB

PEEB is a Partnership dedicated to promoting Energy Efficiency in Buildings. PEEB is currently funded by the German Federal Ministry for the Environment, Climate Action, Nature Conservation, and Nuclear Safety (BMUKN), the French Ministry of Ecological Transition and Territorial Cohesion (MTE), the Green Climate Fund (GCF), the European Union (EU), the Agence Française de Développement (AFD), the International Climate Initiative (IKI), and the Fonds Français pour l'Environnement Mondial (FFEM). The Partnership is part of the Global Alliance for Buildings and Construction (GlobalABC).

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Introduction: why the FinMech4EEB Toolkit

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Smart financial mechanisms are critical to unlocking funding and ensuring the **success of EEB projects**. Yet, two key **challenges** make the choice of effective mechanisms harder: barriers to investment (e.g. high upfront costs) and lack of a common understanding of benefits of EEB among stakeholders.

The FinMech4EEB Toolkit offers a **collaborative, transparent and technically informed** process to overcome both challenges. It offers stakeholders a practical approach for reaching good mechanism choices for each context, with four simple steps and all decision-relevant information in an accessible format.

1. Understand the process	**2. Identify** potential options	**3. Narrow** down longlist options	**4. Prioritize** potential options
Tool: Step-wise Screener for EEB Practitioners **Outcome:** Shared understanding of the process	**Tool:** Guidance Manual for EEB Practitioners **Outcome: Longlist** of all possible options	**Tool:** Multi-Criteria Assessment Excel **Outcome: Shortlist** of higher potential options	**Tool:** Multi-Criteria Assessment Excel **Outcome: Scored Shortlist ranked** by context relevance

The toolkit is the first resource that translates complex financing design into a practical and results-oriented process aiming at developing country contexts, backed by more than 15 years of experience in the promotion of energy efficiency investment by GIZ.

Quick tool overview

Each of the FinMech4EEB tools embed all relevant mechanism information into a structured, collaborative process. The tools focus on decision-relevant aspects at each step:

Step	Tool	Added value
1. Understand the process	Step-wise Screener for EEB practitioners	• Overview of stepwise approach for going from zero to prioritised shortlist
2. Identify all potential options	Guidance Manual for EEB practitioners	• Plain-language description of 14 financial mechanisms (debt, grant, equity and risk mitigation instruments) and 12 support mechanisms (enabling instruments) • Classification of mechanisms by building segment (residential, commercial, public) pros/cons, a viability rating, use cases and examples for each mechanism
3. Narrow down according to potential	Multi-Criteria Assessment Excel Tool	• Qualitative assessment of longlist options for creation of shortlist
4. Prioritise for context relevance		• Automatically scores and ranks shortlisted options according to 7 relevant categories • Considers country, sector, and regulatory context

How to use this Manual?

The Manual has the following sections:

- An introduction of the key barriers to financing EEB
- An overview of financing types explains the main four types of financing (debt, equity, grant, risk mitigation).
- Financial mechanism matrix presenting an overview of the 14 financial mechanisms
- List of financial mechanisms, each presented with a brief introduction, an assessment of its viability, its potential impact, some applicability/use cases and existing examples. Reference links are provided for further reading.
- Support mechanisms matrix presenting an overview of the 12 support mechanisms
- List of support mechanisms presented in detail (same as the financial mechanisms list)
- Finally, a finance glossary introduces the list of abbreviations briefly explains technical terms and



Barriers to Energy Efficiency in Buildings

Barriers to Financing Energy Efficiency in Buildings

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Energy Efficiency Financial Investments in Buildings are critical in achieving sustainable development goals and substantial cost savings. Unfortunately, often they are facing barriers to their implementation:

1. **High upfront cost**: EEB investments in equipment and technologies (particularly for envelope retrofits) are expensive and the return on investment resulting from cost savings only occurs over several years.
2. **Lack of availability/access**: limited access to appropriate or affordable financial mechanisms, high performing technologies, proper installation, post-sales and maintenance services, etc.
3. **Competing investment priorities**: investment options and resources are limited. Often other business investments are considered with higher priority, and EEB investments are overlooked, delayed or discarded.
4. **Limited understanding**: Lack of knowledge of the benefits of EEB (e.g., scale and importance of recurring savings, energy bill savings) and high perception of risk (financial lenders, commercial and public entities often perceive EEB investments as very risky, preventing them from investing).
5. **Split incentives:** Often in EEB, the entity incurring the cost/investment (i.e., paying for new EEB equipment) and the one receiving the benefits (i.e., saving money on electricity bills) are different. This leads to misalignment of priority, divergent interests and difficulties to unlock the EEB potential of investments.

Further information: UNECE 2017: Overcoming barriers to EE; 2019 BASE-U4E: Manual of EE FinMechs



Overview of Financing Types

Overview of Financing Types

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One entity (lender) lends money to another (borrower). Repayment is done on an agreed schedule and consists of borrowed money as well as interest. Collateral is often necessary as a reassurance for the lender. Examples include credits, mortgages, commercial loans, concessional loans, blended loans.

Debt

Non repayable fund contributions by a grantor for specific purposes; sometimes it will require contributions by the recipient (conditional grant).

Grant

Equity

Investing in shares of a company representing partial ownership; receiving funding from investors via equity (shares); sharing the profit with investors.

Risk Mitigation Instruments

Financial instruments that are available in the market to mitigate the risks of investing. Examples include guarantees, insurances.

Structuring: Financial instruments or transactions are often structured to combine different types of financing with each other, e.g., debt made concessional with a grant (see below), supported with risk mitigation instruments….and often accompanied also by additional supporting mechanisms.

Blended Finance: When concessional public or philanthropic funds are combined with commercial private capital in a single financing vehicle, this structuring approach is referred to as blended finance. Blended finance improves the risk-return profile for commercial investors by absorbing higher risks, with the aim of increasing private sector investment in sustainable development. Examples of blended finance structures include first-loss tranches (public/donor absorbs initial losses), subordinated debt, technical assistance grants alongside private equity, guarantee layers, and others.

More Information: 2019 BASE-U4E: Manual of EEB FinMechs , EU Interrreg Financing models for energy efficiency, GIZ DIAPOL's Innovative EEB instruments for the MENA region; EEFIG's Financing Energy Efficiency; Clean Energy Ministerial Finance; OECD's Blended Finance; Convergence's Blended Finance 101



Financial Mechanisms Matrix

Overview of financial mechanisms, sectoral applicability and involved actors

Financial Mechanisms Matrix

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Public Sector	Commercial Sector	Residential Sector	EEB Financial Mechanism	Commercial banks	NDB (National development banks)	Bi/Multilateral development banks	Microfinance institutions (MFI)	Pension funds	Non-banking financial institutions	Private equity funds	ESCO (Energy Service Companies)	Insurance companies	Guarantee institutions	Utilities, dealers	Governments (national, subnational, municipal)
X	X	X	Green Loans	X	X	X	X	X	X	X	X			X	
X	X	X	Green Credit Lines	X	X	X	X		X					X	
X	X	X	Revolving Loan Funds / Green Revolving Funds	X	X	X	X	X							X
	X	X	Mortgage Financing	X	X	X									X
	X	X	Property Linked Finance	X	X	X		X	X	X	X	X	X	X	X
X	X	X	On-bill Financing Models	X										X	X
	X	X	Dealer / Trade financing	X										X	
X	X	X	Green Bonds (Sovereign / Corporate)	X	X									X	X
	X	X	Microfinance	X			X	X		X		X			
X	X		Crowdfunding for Energy Efficiency							X					
X	X	X	EE Rebates, Subsidies and Capital Grants	X	X	X								X	X
X	X	X	Guarantees for EEB	X	X	X		X	X			X	X		X
X	X	X	Insurances for EEB	X	X	X		X	X			X	X		
	X		Energy Savings Insurance								X	X			

Financial Mechanisms Matrix

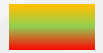
Legend:


Debt


Equity


Grant


Risk Mitigation Instrument


Blended Debt/Grant/Equity

If several colors are indicated, the financial mechanism combines different types of financing.

X: Marked with X if the applicability of the FinMech for the public, commercial, or residential sector is medium or high. Marked with X for key actors involved in setting up or operating the financial or support mechanism.

Note: This list is non-exhaustive, focusing on the most relevant financial mechanisms and actors involved in EEB financing.

Other financial mechanisms not listed here but that can also be used for EEB financing include, for instance, direct equity financing, project finance (as a specific type of debt financing) or savings groups.

Other relevant actors that are not listed but could play an important role include Ethical/Value Based Banks, cooperative banks and credit unions, housing finance institutions, impact investors, export credit agencies, and international climate funds (e.g., GCF, GEF).



Financial Mechanisms

Legend and detailed list of EEB financial mechanisms

Name of the instrument (legend for FinMech & SupportMech)

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Description: Name of the instrument, how does it work, characteristics, value, duration, potential, flexibility; examples

Requirements/Viability:

Technical viability (T): Assessment of the technical complexity and easiness for the EEB FinMech to be put in place from a technical standpoint. Does it require a lot of advanced knowledge or is relatively easy to design and straightforward to put in place (i.e., auctions will have low viability while taxes will have high viability).

Financial viability (F): Assessment of the complexity and easiness for the EEB FinMech to be put in place from a financial standpoint, i.e., is the mechanism easy to be funded? is it self-sustained? will interested public/private parties be willing to take the risk? or will the mechanism need additional risk mitigation and supporting instruments for involved stakeholders to invest into it?

Institutional viability (I): political/regulatory Assessment of the easiness for the EEB to be put in place from institutional, regulatory and political standpoints. Does it require a lot of changes or can be adopted simply, smoothly and easily within the existing legal, regulatory, institutional and political environment? Does the legal framework allow and properly regulate its use? Are existing institutions and political context inducive to it?

Applicability/Use Cases:

Residential Buildings (R): Assessment of the applicability and exemplary use cases in R

Commercial Buildings (C): Assessment of the applicability and exemplary use cases in C

Public Buildings (P): Assessment of the applicability and exemplary use cases in P

Support Mechanisms: Additional accompanying financial & non-financial mechanisms that can be used to support/catalyze the implementation of the EEB FinMech

Key Partners/actors: Important actors necessary for the implementation of the EEB FinMech

advantages	disadvantages
→ Challenges, opportunities and limitations of the financial instrument	

Further information: where to find further examples or additional useful information on the EEB financial mechanism

Green Loans

Description: A lender provides a sum of money to a borrower for EEB investments; collateral may be required depending on lender risk appetite and borrower creditworthiness. The loan is repaid over an agreed tenor (principal + interest). Lenders assess borrower creditworthiness before approval. Local financial institutions (LFIs) and microfinance institutions (MFIs) are best positioned to provide loans to end recipients (e.g., individuals, MSMEs, building owners). LFIs/MFIs often borrow from development banks or multilateral funds to on-lend for EEB. Revolving loans allow borrowers to draw down, repay, and re-borrow within a fixed capital pool. They are a flexible financing tool due to their revolving structure (see RLF next).

Requirements/Viability:

Technical viability: high - easy to implement due to its common usage; however, LFI account requirements may exclude unbanked borrowers
Financial viability: mid - collateral may be required; MFIs can provide collateral support for low-income or high-risk borrowers, but pre-loan credit assessment is standard
Institutional viability: high - legal frameworks must be in place to ensure loans are feasible and comply with regulations (e.g., consumer protection, anti-money laundering)

Applicability/Use Cases:

Residential: high – rooftop PV, EE appliances, insulation, HVAC, deep retrofits
Commercial: high – lighting, HVAC, smart/automation, PV installations
Public: high – schools, universities, hospitals retrofits; public housing; street lighting

Support Mechanisms

Guarantees; Technical Assistance; Grants; Blended finance; First-loss guarantees.

Key partner/actors:

LFIs: Originate and disburse loans to end borrowers.
Governments/MDBs: Provide concessional funding, guarantees, or TA to LFIs.
Development agencies: Offer capacity building for LFIs and borrowers

advantages	disadvantages
Low interest rates and revolving loans: (long term tenors)	May require support mechanisms (e.g., guarantees) for high-risk borrowers.
Accessible for everyone (who has access to formal financial system)	Higher interest rates for unbanked or low-credit borrowers without collateral.
Overcome upfront cost barriers	Some LFIs have poor repayment rates due to weak credit assessment or lack of transparency in loan terms.

Further information: 2019 BASE-U4E: Manual of EE FinMechs pg: 16/40/61, CEM: Concessional Loans; ; EEFIG's Financing Energy Efficiency (2023)

Green Credit Lines

Description: special type of loan where LFIs access concessional financing from MDBs/PFIs (e.g., below-market interest rates, extended tenors) for EE/RE investments and on-lend to borrowers. LFIs access concessional financing from MDBs/PFIs (e.g., below-market rates, longer tenors) if used for EE/RE investments and subsequently on-lend to borrowers.

Examples: **EBRD's** Green Economy Financing Facility (GEFF) in 20+ countries (€5B+ deployed, 100K+ projects); **XacBank** Mongolia Residential/commercial EEB loans, ($100M+ deployed), KfW's **EcoCasa** Mexico (100K+ green mortgages, €2B+ deployed), AFD **Green Energy Fund** Public/commercial EEB in Africa (€500M+ deployed), etc.

Requirements/Viability:
T: mid - technical assistance (e.g., for LFI capacity building, EE project appraisal, or MRV) is often required and can be provided by PFIs/MDBs.
F: mid – collateral, and guarantees may be required from borrowers; concessional financing from MDBs (e.g., GCF, EBRD) reduces costs for LFIs.
I: mid - requires institutional capacity (e.g., LFI risk management systems) and a legal framework for credit lines (e.g., banking regulations, contract enforcement).

Applicability/Use Cases: focus on specific green purposes only in particular on Energy Efficiency for Buildings
R: mid – via real estate developers, MFIs, or government programmes for individual households (e.g., green mortgages, EE loans).
C: mid - applicable to big and medium-sized enterprises; low applicability for MSMEs due to collateral requirements and high transaction costs.
P: mid - high applicability for public buildings such as universities, schools etc.

Support Mechanisms
Concessional/Blended finance from MDBs/multilateral funds/institutions (i.e., GCF, EBRD, KfW, AFD, etc.); Guarantees; Positive lists; Risk-sharing facilities; Technical Assistance.

Key Partner/actors:
MDBs/National Development Agencies: Provide concessional financing, guarantees, and TA to LFIs.
Local Governments: Improve investment climate (e.g., streamline permitting, offer incentives)

advantages	disadvantages
Longer tenors become more viable	Low applicability to low-income households & MSMEs
Reduced interest rates are possible	Engagement necessary to raise awareness
Flexible and can be coupled with many support mechanisms	Limited accessibility for unbanked borrowers without LFI accounts

Further information: 2019 BASE-U4E: Manual of EE FinMechs pg. 16/40/61; WB ESMAP's Financing EE, Part 2: Credit Lines, KfW's EEB Green Credit Lines, IDB/AFD/I4CE Green Lending report

Revolving Loan Funds (RLF) / Green Revolving Funds (GRF)

Description: special type of loan fund that starts with a fixed pool of capital and provides loans to borrowers with flexibility: allowing to borrow, repay and re-borrow with fluctuating interest rates (often below market rate). Usually managed by a PFI/community group/ NGO/university; repayments can be traditional (fixed installments) or innovative (e.g., linked to utility bill savings resulting from improved EE.

Examples: EU RLFs: KAWKA (Poland), Energy Fund (Italy); Harvard's GRF (US); Thai Energy Efficiency Revolving Fund (EERF) (Thailand)

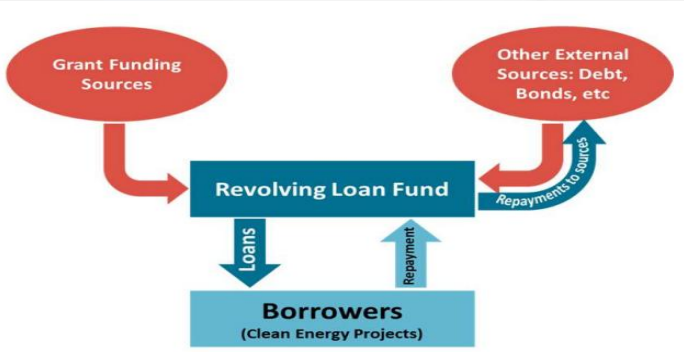
Requirements/Viability:

T: mid – some complexity and costs; requires MFI technical assistance and LFI loan portfolio management
F: low – start-up capital, concessional financing (grants, low interest loans etc.) and collateral required
I: mid – institutional framework (e.g., governance structure to approve each loan) required

Applicability/Use Cases:
R: mid - retrofits in residential buildings
C: high - especially adequate for MSMEs who struggle to receive loans
P: mid - public buildings, public infrastructure projects, universities, etc.

Support Mechanisms:
Guarantees, Positive lists, Grants, Credit enhancements

Key Partner/actors:
Community groups (when managed by a community) to administer directly revolving (micro) loans.
(Commercial) LFI to administer and manage the revolving loans in commercial setting.
Governments/PFI at national/subnational/municipal level to administer public schemes.
Utilities, universities, NGO – third sector/CSO schemes.



advantages	disadvantages
Low interest rates and high flexibility	Fixed pool of capital; when lent out, no more financing can occur → Risk of fund depletion if repayment rates are low or defaults occur; requires strong credit risk assessment
Broader range of customers including MSMEs	Community revolving funds: Lack of capacity, transparency and repayment rates,
Flexible collateral	High administrative costs.

Further information: 2019 BASE-U4E: Manual of EE FinMechs : pg: 16/40/61; GRF Guide; WB ESMAP's Financing Energy Efficiency, Part 1 : Revolving Funds; Interreg's Financing EE: Revolving Loan Funds, CEM: Clean Energy Funds; ; EEFIG's Financing Energy Efficiency

Mortgage Financing: Energy Efficient Mortgage (EEM) / Green Mortgages

Description: special type of loan with **mortgage** on purchased assets by which an entity purchases, sells, refinances or refurbishes a home that is/will be energy efficient (upon construction or after upgrades, in which case these EE upgrades are part of the mortgage). EEMs are loans that improve the building value while reducing energy costs/utility bills. An energy audit (or standardized energy performance label) may be required to determine eligibility and potential upgrades.

Examples: EEM; EEM Initiative (100+ banks, €10B+ green mortgages issued) & EEM Label (standardized framework for 20+ countries); LENDERS (UK); Green Mortgage Programme (Mexico); CMHC (Canada)

Requirements/Viability:

T: mid –advanced regulatory & technical capabilities (trained energy auditors, standardized methodologies, certified professionals)

F: mid - limited to home buyers/refinancers; can be added to existing mortgages (no additional upfront capital required)

I: mid - no governmental energy subsidies required; legal framework required; supply and demand side barriers need to be overcome

Applicability/Use Cases:

R: high - EE investments in residential buildings (e.g., insulation & EE equipment retrofits, rooftop solar, new green buildings, etc.)

C: high applicability – EE investments in commercial and industrial buildings (same)

P: mid applicability – EE investments in public buildings

Support Mechanisms

Home improvement (concessional) loans; Tax credits; Rebates; Guarantees; Insurances.

Key Partner/actors:

Energy auditor: assesses the property (mandatory and/or subsidized energy audits).
Banks (mortgage lenders): raise awareness and offer preferential terms to buyers.
Government: draft necessary policies to provide the framework for technical assessment.
Regulation needs to protect lender and especially borrower against loss of property because of only a few missed payments.

advantages	disadvantages
Reduces need for subsidies	Overestimation can lead to high costs/lower savings
Facilitates private investment in EEB	Low visibility makes it less attractive to lenders.
Overcomes high upfront costs	Perception of high risk from lenders & borrowers
	Limited to countries with developed mortgage markets and legal frameworks (e.g., property rights, foreclosure laws)

Further information: 2019 BASE-U4E: Manual of EE FinMechs: pg: 30; EEFIG's Financing Energy Efficiency; PACE Nation; Better Buildings Financing Navigator

Property Linked Finance

Description: innovative financing solution that links repayments to the property rather than the owner, meaning obligations transfer to the new owner upon sale. This directly overcomes the "payback period barrier" — where owners decline EEB investments because the payback period exceeds their expected ownership.

PLF funds up to 100% of upfront costs of energy efficiency, renewable energy and climate resilience upgrades, with repayment terms aligned to the useful lifetime of the measures (up to 20–30 years). Finance is secured against the property (not the individual) via a property lien, tax assessment, or equivalent legal charge. PLF is also known as Property Assessed Clean Energy (PACE) in the US and Canada, and Environmental Upgrade Finance (EUF) in Australia.

Examples: PACE (USA across 30+ states, $10B+ deployed); EUF (Australia commercial EEB only), Canadian PACE, PACE Canon (Spain), PLF (UK)

Requirements/Viability:

T: mid – requires enabling legal framework (see below); standardized documentation, contractor oversight and a qualifying framework of eligible measures (i.e. positive list) is strongly advised to facilitate assessment and standardize procedures

F: mid – no upfront capital required from the property owner; 100% financing by capital provider (bank, fund) increases lender risk; this requires securitization/risk mitigation (e.g., guarantees) to attract institutional capital and achieve scale

I: mid – requires national-level enabling legislation (e.g., property lien laws, tax assessment frameworks) and institutional capacity (e.g., property registries, lien priority rules); complex to navigate in emerging markets without established property law

Applicability/Use Cases:

R: mid – effective for residential retrofits and new-build housing where strong underlying demand exists; complex in multifamily buildings (governance and consent challenges)

C: high – well-suited to commercial building retrofits and new construction; larger deal sizes absorb transaction costs; sector where PLF markets are most mature (i.e. US, Australia)

P: low-mid – applicable for public-sector owned commercial buildings; rare in purely public-sector contexts; requires government willingness to act as property owner

Support Mechanisms

Guarantees to reduce lender risk; Positive lists of eligible EEB measures; Contractor oversight, qualifying frameworks & standardized contracts/templates (e.g., GPLFI's PLF Principles and Pathways).; public grant co-financing for early pilot phase; Securitization vehicles to attract institutional capital.

Key Partner/actors:

National/local governments: provide enabling legislation, adapt existing legal mechanisms; manage property liens
FIs and capital providers (banks, funds): originate and fund PLF; build securitization market
Green Finance Institute / GPLFI: PLF Principles, Pathways and market development support
Technology providers and contractors: install measures; require training and oversight frameworks

advantages	disadvantages
Overcomes payback period barrier: repayment transfers with the property on sale	Requires enabling legislation or adaptation of existing property law; complex to set up in emerging markets
No upfront cost to property owner; 100% financing of eligible EEB measures	Potential priority conflict with existing mortgage lenders; mortgage providers must be engaged early
Long repayment terms (up to 30 years) matched to useful life of measures; immediate cash-flow benefit possible	High transaction costs in early markets; scalability requires large deal volumes or institutional securitization

Further information: GFI/GPLFI PLF Principles (2025); GFI/GPLFI Proven Pathways report (2026); Global Property Linked Finance Initiative; PACENation (US); Better Building Finance (Australia)

On-bill Financing Models

Description: on-Bill Financing (OBF) – also known as on-Bill Recovery (OBR) – allows customers to repay loans made for EE improvements on their electricity bills. Customer/beneficiaries will apply for a loan for an EE expenditure, purchase and/or investment (usually one of a defined set of eligible measures), and repayments are then added to the customer's electricity bills.
OBF enables repayment for EE and RE upgrades via utility bills (electricity, gas, water, or district energy), so they are especially adequate for utility customers. They don't require upfront investments; however, the utilities will need to advance the cost and the mechanism results in increased monthly payments via the utility bills.

Examples: INARA (Morocco's utility-led OBF for LED lighting), EE Scale-up Program (India's Pay-As-You-Save (PAYS) on-bill building retrofit program)

Requirements/Viability:

T: mid – utilities require technical assistance to integrate OBF into billing systems (e.g., dynamic tariff structures, repayment tracking); beneficiaries require awareness raising program and guidance
F: mid – utilities reluctant to finance; customers will require credit risk assessment (but past bills can be used as proxy)
I: mid – difficult with private utilities, regulatory approval (e.g., from utility commissions or energy ministries) often required with State-Owned Enterprises (SOEs) ; need strong government involvement and push

Applicability/Use Cases:

R: high - EE equipment, lighting; less for EE retrofits
C: mid – EE equipment and efficient lighting
P: mid – can be done with public buildings and municipal lighting via their utility bills

Support Mechanisms

On bill loan-funds; Loan guarantees; Positive lists

Key Partner/actors:

Utilities especially if SOEs or government-owned
Financial institutions (public/private)
Development agencies: technical assistance for utilities in setting up these models

advantages	disadvantages
Cost savings from day one and paid directly from bill	Complicated to set-up and requires advanced IT billing system from utilities.
No upfront investment costs and flexible (can be adjusted & adapted)	Utilities reluctant to advance finance (works better with SOEs); risk of service disconnection for defaulting customers (social safeguards required)
Low default rates (failure to pay can be tied to disconnection).	Risk of power cut for defaulting customers. If transferability is not allowed, beneficiaries must pay off entire loan upon sale, which results in lower energy savings

Further information: 2019 BASE-U4E: Manual of EE FinMechs : pg: 24/66, GIZ DIAPOL's Innovative EE instruments for the MENA region pages 6-9 (utility managed programmes), Interreg's Financing EE: On-bill financing; ; EEFIG's Financing Energy Efficiency

Dealer / Trade financing - linked to Leasing

Description: financial support from a technology provider. Technology providers or partner LFIs finance EE purchases, with repayment over 30–180 days (short-term credit). Can be direct (technology provider uses its own capital) or indirect (provider facilitates a loan from a local financial institution (LFI) to the customer). Can be supported also by export/trade agencies and banks with export credits provided in countries of origin of the EE technology.

Examples: M-KOPA pay-as-you-go (PAYG) solar dealer financing (Kenya, 1M+ systems); Daikin OPTIMUS trade credit (global, 10K+ units/year); Philips LED lighting / Signify's lighting capital (global)

Requirements/Viability:

T: high – relatively simple to develop
F: mid - dealers often lack balance sheet capacity; requires risk-sharing with LFIs, export agencies, or MDBs
I: mid - require legal frameworks for trade credit (e.g., enforceable contracts, consumer protection) and dealers-LFIs market agreements.

Applicability/Use Cases:

R: mid- limited to residential EE equipment (generally too small and cheap to justify dealer financing beyond **rebates**)
C: high – bigger commercial & industrial EE equipment more adequate for dealer financing from technology providers
P: low – possible, but rarely used

Support Mechanisms

Credit lines, Direct/Revolving Loans, Guarantees for technology provider; Positive Lists; Export credit agencies (e.g., Euler Hermes, SACE) to provide export credits for technology providers. Commercial retail distributors are usually required to support with market access, otherwise not accessible for technology providers

Key Partner/actors:

LFIs: support dealer financing schemes.
Export/Trade Agencies and Export banks: to provide credit letters and export credits
Technology providers: provide the financing directly or indirectly via an LFI

advantages	disadvantages
Highly beneficial when no credit access is possible	Financial capacities of technology providers are limited
Provides financial support in regions, that are otherwise difficult to penetrate	Limited to finance manufactures and other dealers

Further information: 2019 BASE-U4E: Manual of EE FinMechs : pg: 18/43; ; EEFIG's Financing Energy Efficiency

Green Bonds (Sovereign / Corporate)

Description: Investment debt securities where an issuer (government, MDB, bank, or corporation) raises capital from investors specifically earmarked for green projects, including EEB. Repayment is made at maturity with regular interest payments (coupon). Proceeds must follow use-of-proceeds frameworks (e.g., ICMA Green Bond Principles) and undergo third-party verification (e.g., by Climate Bonds Initiative, ISS-ESG). Sovereign Green Bonds are issued by national governments and particularly relevant for financing large-scale public building renovation programmes and setting national EEB standards. Proceeds can be on-lent to local financial institutions or used to directly fund EEB projects, often combined with green credit lines (e.g., World Bank green bonds on-lent to LFIs for EEB; IFC green bonds for corporate EEB projects).

Examples: World Bank ($20B+ issued, ~15% allocated to EEB); IFC ($5B+ for emerging market EEB, often through EDGE label); KfW's Federal Funding for Efficient Buildings (BEG); EBRD GET approach; Sovereign green bonds in Chile (2019 – $1.4B sovereign green bond, 20% for public EEB), Egypt (2020 – $750M for green buildings), etc.

Requirements/Viability:

T: mid – requires a credible green bond framework (e.g., aligned with EU Taxonomy, ICMA GBP), use-of-proceeds reporting, and independent verification

F: mid – depends on capital market maturity; concessional terms lower issuance costs; a "greenium" (lower yield, longer tenor) is possible for quality issuers

I: mid – requires regulatory framework / Green Bond Taxonomy; in emerging markets, domestic capital markets must be sufficiently developed

Applicability/Use Cases:

R: mid – via public housing (sovereign) or private real estate developer (corporate) for collective residential projects (no direct use for individual homeowners)

C: high – large-scale commercial EEB investments; increasingly used for MSME EE loans

P: high – sovereign for public building programmes; can directly fund public EEB targets in NDCs

Support Mechanisms

Green Bond Principles/Taxonomy (eligible EEB use of proceeds); Guarantees; Blended Finance to reduce cost of capital; Technical Assistance; MDB co-financing; Positive lists

Key Partner/actors:

National governments & MoF: issuers of sovereign green bonds

MDBs (World Bank, IFC, EBRD, AFD, KfW): anchor investors, structuring support

Local Financial Institutions: on-lenders of bond proceeds to EEB projects

Private institutional investors (pension funds, insurance): bond buyers

advantages	disadvantages
Access to large pools of long-term institutional capital at scale	Requires developed capital markets; limited applicability in least-developed economies
Sends strong policy signal and raises the profile of EEB on capital markets	Higher issuance costs (e.g., verification, reporting, external reviews) and capacity needs vs. conventional bonds.
Potential "greenium" lowers cost of capital vs. conventional bonds	Only 15% of green bond proceeds in emerging markets are currently directed to buildings (CBI/OECD 2024).

Further information: ICMA Green Bond Principles 2021; IFC`s sustainable buildings finance reference guide; CBI State of the Market 2024; OECD Sustainable Bonds Trends 2025; WB Sustainable Development Bonds Impact Report 2025

Microfinance (see also crowdfunding)

Description: Microfinance Institutions (MFI) provide financial services (usually small credits/loans) to unbanked borrowers (e.g., low-income households, rural communities, or MSMEs) due to lack of collateral, high perceived risk, or small transaction sizes. The MFI (usually a financial NGO; but often an NDB/LFI) will receive external finance from a MDB including concessional loans (subsidies) at below market interest rates, equity/grants, and technical assistance. The funds are then sub-lent to customers in very small (i.e., micro) quantities and paid back at relatively* concessional interest rates. There are formalized banking **institutions** that focus on microfinance. Microfinance can be delivered via MFIs, fintech platforms, or in partnership with other mechanisms (e.g., crowdfunding for larger projects).

Examples: IFC/EBRD-EKI (Bosnia EE retrofits), **Green Microfinance Map** (worldwide loans including for home EE retrofits)

Requirements/Viability:

T: high – easy, but requires technical assistance and customer engagement that MFI will need to provide

F: mid - very accessible to customers, but relatively high interest rates for micro-repayments

I: low – legal framework (incl. consumer protection regulations required to prevent over-indebtedness and ensure fair lending practices.; subsidies/external funding by MDBs necessary, capacity development for MFIs needed to assess EEB technology providers, validate energy savings, and expand geographic reach; strong customer engagement to overcome barriers

Applicability/Use Cases:

R: mid - small EE equipment and insulation for rural & low-income customers incl. women

C: high - EE equipment and insulation for small and micro businesses;

P: low/null applicability

* Sometimes MFI must charge relatively high interest rates due to high risks and transaction costs.

Support Mechanisms

Guarantees; Loan funds; Positive lists

Key Partner/actors:

Donors/Development agencies: conduct customer engagement, funding, TA support and capacity development to MFI and beneficiaries.

Governments: provide subsidies; provide support in setting up the model and legal framework

advantages	disadvantages
Provides finance to rural, low income & minority customers (i.e. women, poor, etc.)	Limited scale for large EEB projects (e.g., commercial retrofits, multi-family buildings)
Improve small businesses utility bills.	High interest rates (10–25%) for customers due to perceived risk and transaction costs.
Overcomes barrier of high upfront costs for small and very small businesses	

Further information: 2019 BASE-U4E: Manual of EE FinMechs : pg: 19, Clean Energy Ministerial: Microfinance

Crowdfunding for Energy Efficiency in Buildings (CF4EEB)

Description: Crowdfunding for EE in Buildings (CF4EEB) mobilizes funding from multiple investors (individuals or institutions) for EEB projects. Crowdfunding typically uses online platforms to gather funds from many investors; EE project values up to €5M are now common (e.g., for solar, deep retrofits, or commercial EEB). Common crowdfunding models for EEB can include donation-based (philanthropic contributions); equity-based (investors receive shares); debt-based (loans repaid with interest); P2P lending (direct loans from individuals); and reward-based (non-monetary returns, e.g., naming rights).

Examples: **Crowd/Social Funding** platforms: **Abundance Investment** (UK – €10M+ for EEB projects); **Lendahand** (Netherlands – includes EEB in emerging markets)

Requirements/Viability:

T: mid - requires internet access, strong marketing (e.g., social media, investor outreach), and a user-friendly platform to attract investors

F: low - easy accessibility. No financial institution must be involved, high interest rates for investors

I: mid - a clear regulatory framework needed for crowdfunding; legal uncertainty (e.g., investor protection, securities laws) common in emerging markets

Applicability/Use Cases:

R: mid - community solar, multi-family retrofits, or aggregated residential projects

C: high - commercial buildings owners for office retrofits, EE equipment, and RE installations

P: mid - public entities & building (schools, hospitals), via commission project developers

Support Mechanisms

Lease; Shares savings contracts; Guarantees e.g., from governments or MDBs) to reduce investor risk and attract capital.

Key Partner/actors:

Public, CFP Crowdfunding Platforms, Project developers (ESCO).

advantages	disadvantages
Applicable when no other forms or financial systems are available	Low returns for building owners (clients)
Internet presence boosts awareness and market outreach for the energy efficiency	High competition for investor attention (applies to all crowdfunding).
	Platform fees (5 -10%) reduce net proceeds for projects.

Further information: 2019 BASE-U4E: Manual of EE FinMechs : pg: 50/64; Worldbank: Crowdfunding Potential for the developing world; Green energy crowdfunding platforms

EE Rebates, Subsidies and Capital Grants

Description: if a purchased good meets specific EE requirements a rebate can be received (therefore lowering its costs). Subsidies lower prices via direct payments (e.g., cash grants) or indirect support (e.g., tax credits, reduced utility rates) to individuals or firms. Government rebates/subsidies (public funds) are distinct from manufacturer rebates; while both reduce upfront costs for EEB measures), the latter are considered private marketing investments directly financed by suppliers to increase sales.

Examples: ASI (Mexico, 2M fridges & aircon replacement subsidy, 9+GWh saved); PROSOL (Tunisia, residential SWH capital grants, 270k+ installed); WB EE Project (Armenia, public retrofit capital grants)

Requirements/Viability:

T: high – easy to develop technically (e.g., simple application forms, clear eligibility criteria) and implement (e.g., via utilities or retailers)
F: low - Governments/utilities require large capital pools (e.g., from taxes, utility surcharges) and/or external support (e.g., MDB grants); long-term funding is critical
I: mid – easy to draft but politically difficult to sustain; long term vision, EE policies and regulations & consumer awareness required.

Applicability/Use Cases:

R: high – building retrofits i.e., insulation, EE equipment
C: high - commercial buildings & equipment HVAC
P: low – can be done but doesn't make much sense cf. public procurement

Support Mechanisms

Concessional loans; Guarantees; Carbon finance; Taxes

Key Partner/actors:

Governments: provide financial incentives, draft and enforce supporting policies
Utilities: provide financial incentives
MDB: provide capacity building through technical training

advantages	disadvantages
Bring certain technologies to market readiness, that otherwise would not	Must be well coordinated to become self sustaining + risk of market distortion if not phased out or targeted (e.g., may crowd out private investment)
Enable energy efficiency equipment to be affordable by a broader audience	Difficult to ensure efficient and social use of government funds + risk of free-riding (subsidizing actions that would occur without support)

Further information: 2019 BASE-U4E: Manual of EE FinMechs pg: 35 and 53, CEM: capital subsidies, grants and rebates; GIZ DIAPOL's Innovative EE instruments for the MENA region pg. 13-14 (Mechanism for Accelerating Replacement of the Stock of Energy-using Equipment and Appliances), Clean Energy Ministerial's SEAD 2013 report

Guarantees for EEB

Description: agreement that guarantees that a debt will be repaid to a lender by another party (guarantor) if the borrower defaults. Guarantees reduce risk for lenders/investors by covering a portion of losses (e.g., 50-80% of default risk) if a borrower defaults. They typically include eligibility criteria (e.g., max loan amount, EE project type, borrower credit score) and fees (0.5–2% of guaranteed amount). Guarantees can serve as collateral for lenders. A specific type of guarantee usually done for loan portfolios and big credit lines & facilities are a risk sharing schemes across multiple lenders that result in shared, and thus reduced, risk.

Examples: **MIGA** – EEB guarantees in 10+ countries, $500M+ deployed; **WB Guarantees Program**, **African Guarantee Fund**, **Green Guarantee Company** (UK), Crédit Agricole's **UM6P Campus Green Guarantee** (Morocco)

Requirements/Viability:

T: low - not difficult to develop; requires a feasibility concept (e.g., business plan, EE savings estimates) submitted to guarantors; LFI account needed; TA advised for structuring

F: mid - serve as securities/collateral and has a small fee cost to be paid. Sometimes additional collateral is required

I: mid - issued by LFI/IFI/PFI, insurer, government or utility; a well-developed banking system is highly beneficial

Applicability/Use Cases:

R: high - residential EE equipment & building retrofit

C: high –businesses (incl. MSMEs) & intermediaries (ESCOs, build. owners, managers)

P: high - public sector also able to access guarantees; often part of PPPs

Support Mechanisms

Technical Assistance; Grants/Concessional Finance; Positive lists.

Key Partner/actors:

Insurance companies – to cover risks and support credit evaluation

International financial institutions (IFI); LFI - set up/manage guarantee programmes for EEB

Governments – set up guarantee programmes for EEB

Utilities /ESCOs: project developers

advantages	disadvantages
Help raise EEB finance at more favorable terms for borrowers	Requires well-developed banking system and bankable projects (e.g., excludes high-risk borrowers without additional support).
Cover real and perceived risk of EEB investments	Often requires additional collateral
Provide incentives to lend money as risk decreases	Guarantee fees (typically 0.5-2% of loan amount) increase project costs

Further information: 2019 BASE-U4E: Manual of EE FinMechs : pg: 37/54/75, CEM: Loan guarantees

Insurances for EEB (see also Energy Savings Insurance)

Description: risk mitigation instrument through which an entity receives protection against financial losses for scheduled payments. Price depends on evaluated risks and can cover: 1) technological/performance risk (e.g., if equipment doesnot perform as predicted); and 2) credit/contractual obligation (e.g., default on payments). Insurances raise trust in EEB investments by transferring risk from investors to insurers (e.g., via premiums). EEB insurances are often combined with other mechanisms (e.g., leasing, EPC/ESCOs in the case of ESI, or simply green loans) to reduce the risk of technology failure resulting in losses for asset owners.

Examples: **HSB EE Insurance** (US/Canada), UNEP FI's **NZIA** & V20 **Sustainable Insurance Facility**, **Sustainable Insurance Principles**, etc.

Requirements/Viability:

T: low - insurance companies are less familiar with EEB risks, technical assistance is recommended to develop actuarial data (e.g., failure rates, savings verification).

F: low - Insurance is often limited to specific risks (e.g., performance, credit); small premiums (0.5–3% of project cost) are required, depending on risk evaluation.

I: low - insurance system required; some insurances are obligations for accessing finance or installing EE equipment

Applicability/Use Cases:

R: high - new EE equipment, insulation & retrofits, etc. (any EEB measure can be insured)

C: high - all businesses, 3rd party investors, project developers, technology providers, etc.

P: high - applicable as above to any EEB measure.

Support Mechanisms

Insurances increase likeliness to access loans; Positive lists assist in assessment procedures

Key Partner/actors:

Project developers : use insurance to secure loans from financial institutions

Insurance companies: administer insurance programmes

Financial institutions: evaluate credit worthiness; access to finance

Government: insurance market regulation

advantages	disadvantages
Greatly increase accessibility for loans	Limited availability in developing countries due to lack of EEB risk data and insurance market maturity
Cover risks of project failure	Insurance companies are not familiar, which makes technical assistance a necessity.
Improves overall perceived risk of EEB	High costs, if risks are perceived as high

Further information: 2019 BASE-U4E: Manual of EE FinMechs : pg: 37/54/75; III's Green Insurance; 2014 Deloitte's Green Insurance Products, CEM: Credit Enhancement and Insurance

Energy Savings Insurance (ESI)

Description: special type of insurance for Energy Performance Contracts (EPC) consisting of 4 elements:
1. Standardized contracts (to guarantee implementation and compliance with expected savings);
2. Energy savings insurance policy (acquired by the project provider in favor of the investor to compensate for non-compliance);
3. Independent validation of energy savings by a certified third party (to evaluate and certify effectively achieved energy savings);
4. Financing (linking ESI to existing instruments, MDBs, PFIs, LFIs).

Examples: **IDB/BANDESAL** (El Salvador, 100+ projects, $50M+ insured), **Go Safe with ESI** (EU public building retrofits, 50+ projects)

Requirements/Viability:

T: mid – requires developing and implementing technical and legal standards (e.g., standardized contracts, MRV protocols)

F: mid - requires initial funding (e.g., for validation entities, premium subsidies); beneficial loan conditions (e.g., low interest, long tenors) for MSMEs improve affordability.

I: mid –due to the high number of stakeholders (engagement is key)

Applicability/Use Cases:

R: low/null - not directly applicable for house owners (too complex)

C: high - typically interesting for MSMEs

P: low/null - not directly applicable for public entities

Support Mechanisms

Guarantees; Green credit lines; On-bill financing; Standardized contracts (e.g., ESI templates)

Key Partner/actors:

Technology providers, insurance companies, financial institutions, validation entity

ESI implementers: development agencies, governments, private actors, ESCOs

Third parties: private investors, project developers and providers as well as end users

advantages	disadvantages
Creates trust and credibility among market actors	Usual barriers for EEB investment inhibit EE upgrades (especially for MSMEs)
Reasonable payback periods make it attractive for investors	# and level of involvement increases admin costs and stakeholder management burden
Self sustaining model over time	
Reduces performance risk for investors and lenders by guaranteeing energy savings.	High administrative costs due to independent validation and stakeholder coordination

Further information: 2019 BASE-U4E pg 56; GIZ DIAPOL's 2020 GIZ DIAPOL page 14-16; ESI Europe; Climate Finance Lab ESI ; Green Finance LAC FinMechs for Sustainable Energy



Support Mechanisms Matrix

Overview of support mechanisms, sectoral applicability and involved actors

Support Mechanisms

Support mechanisms are put in place to make EEB Financing easier to access and implement. Examples:

- **Standards and regulations** such as Minimum Energy Performance Standards (MEPS) for appliances and green building labelling will encourage investments in EEB technologies.
- **Supporting policies and command & control/enforcement mechanisms** (sample testing to verify the implementation of standards, improved enforcing, carrot & stick regulatory and fiscal approaches, etc.)
- **Strong monitoring and evaluation (M&E) as well as monitoring, reporting and verification (MRV)** to improve enforcement and compliance as well as to have better, more reliable data to support communication
- **Technical Assistance** to public and private stakeholders (through programmes such as PEEB)
- Increased **public awareness and acceptance** through education, information and communication campaigns and behavioral change programmes with the support of EEB ambassadors.
- **Circularity and sustainable development:** for example, programmes incentivizing the use of new, high-EE appliances need to be coupled with adequate disposal and waste management strategies for the collection and environmental dismantlement of old, inefficient appliances.

More Information: **2019 BASE-U4E: Manual of EE FinMechs : pg: 9/10;** **2022 DCED Green Private Sector Development Navigator**

Support Mechanisms Matrix

Other specific mechanisms especially relevant for EEB that deserve more attention include:

PEEB PARTNERSHIP FOR ENERGY EFFICIENCY IN BUILDINGS

Public Sector	Commercial Sector	Residential Sector	EEB Support Mechanism	Commercial banks	NDB (National development banks)	Bi/Multilateral development banks	Microfinance institutions (MFI)	Non-banking financial institutions	ESCO (Energy Service Companies)	Insurance companies	Guarantee institutions	Utilities, dealers	Governments (national, subnational, municipal)
X	X		Voluntary Agreements (VA) & Voluntary Targets									X	X
X	X		Mandatory Targets									X	X
X	X	X	Pay per service (PPS) Models: Equipment as a Service and District Service	X					X			X	
X	X		Leasing (Green & EEB Leasing)	X				X				X	
X	X	X	Green / Bulk EE procurement / Purchasing – Auction Systems		X							X	X
X	X	X	Positive Lists	X	X	X			X			X	
X	X		Energy Performance Contracts (EPC) / Energy Service Companies (ESCOs)	X				X	X	X	X		
	X		White / Energy Savings Certificates (ESC) / Labels	X	X	X			X	X	X	X	X
X	X	X	Carbon Finance	X	X	X						X	X
	X	X	EEB Tax Incentives										X
X			Public Private Partnerships (PPPs)	X	X	X		X				X	X
	X	X	Remittance-based Payment Models			X	X	X					X

Note: this list is not comprehensive. Other support mechanisms relevant for EEB financing include fintech solutions, one-stop shops/project preparation facilities (integrated services).



Support Mechanisms

Overview of mechanisms and sectoral applicability

Voluntary Agreements (VA) & Voluntary Targets

Description: Voluntary targets are non-binding commitments by commercial/industrial entities to achieve EE/GHG improvements, often as a steppingstone toward mandatory schemes including activities, timelines, and targets for EE/GHG improvements, with rewards (e.g., public recognition, tax benefits) but no penalties. VA vary greatly in form, legal structure, content, participants and enforceability.
Government role is key to provide enabling policies and regulations, financial/fiscal incentives (grants, tax rebates, exemptions, public recognition, technical assistance and training) and enforcement mechanism (penalty, threat of sanction and of losing incentives, voluntary grace period before mandatory compliance etc.); however VA are a combination of sectoral and individual voluntary commitments, often structured around corporate EE networks with voluntary goals and targets (within a sector, cross sectoral within a region or national). Possible in highly regulated markets such as advanced utilities and industries when companies are encouraged to implement measures voluntarily to avoid being imposed additional regulations.

Examples: VA Industry Wallonia (Belgium industrial EEB 20% energy savings commitment); Acuerdos Voluntarios (Mexico commercial EE retrofits); EELN (South Africa including real estate EE); APL (Chile sustainable construction), CEEVA (Canada residential PayTV EE), EEA (Finland including C & R retrofits)

Requirements/Viability:

T: mid – requires enabling policies (e.g., tax incentives, public recognition), regulations (e.g., reporting requirements), and technical assistance/training for participants
F: high – minimum budget requirements to introduce financial/fiscal incentives
I: mid – requires buy in and a key role for institutions for regulation, public recognition, convening and negotiation with private sector

Applicability/Use Cases:

R: null - not applicable
C: high - all economy, key sectors or even specific companies
P: mid - municipalities

Support Mechanisms

Policies & regulations, incentives (e.g., tax credits, rebates/subsidies), TA & training.

Key Partner/actors:

Governments: national, subnational or municipal level;
Private sector: corporate networks, sectoral federations etc.;

advantages	disadvantages
Carrot & stick VA approach can pave the way to mandatory commitments	Dependent on the good will of private sector participants (no legal obligation to comply).
No enforcement strictly required (compared to mandatory agreements)	Dependent on enabling policies, fiscal incentives and public involvement to sustain participation

Further information: GIZ DIAPOL's Innovative EE instruments for the MENA region pg. 10-11; 16-17; 2011 Energy Policy: Voluntary agreements in EE and ER

Mandatory targets

Description: Mandatory targets for EE savings are set for specific building sectors, property portfolios, or large energy consumers by the government (e.g., commercial real estate, hotels, or new residential construction); negotiations with according sectors are held beforehand to identify realistic targets; usually occur in combination with implementation schedules.
They can include mandatory thermal building regulations (e.g., Morocco's RTCM), Energy Efficiency Obligations (EEOs), Energy Performance Certificates (EPCs) for sales/leases, mandatory energy audits, or the obligation to assign a certified energy manager to large commercial facilities and public sites.

Examples: EU EE Directive; PAT Scheme (India incl. EE in commercial buildings); MEI (Singapore energy improvement for commercial buildings; Energy Performance Certificates (South Africa private residential and commercial buildings); RTCM (Morocco mandatory thermal building code).

Requirements/Viability:

T: mid - requires enabling policies and regulations, energy use intensity baselines, TA and training for architects, engineers and auditors. Targets need to be realistic but motivating.

F: mid - requires budget to for MRV/certification infrastructure and financial incentives (e.g., tax deductions, concessional green loans, or floor-area bonuses) to offset initial compliance costs for developers.

I: mid - monitoring and enforcement institutions required (e.g., Urban Agencies, municipal building permit offices); specific enforceable, economically viable, and legally binding building regulations necessary.

Applicability/Use Cases:

R: high - directly applicable via mandatory thermal codes/building permits (new buildings) and via Energy Performance Certificates (EPCs) upon sale/rent and appliance MEPS (existing)

C: high – commercial developers, real estate management firms, and hospitality portfolios through mandatory EUI caps, periodic energy audits, and required green building certifications

P: mid - municipal, educational, and healthcare building portfolios to establish baselines and trigger market scale

Support Mechanisms

Financial (e.g. tax credits, rebates/subsidies, green mortgages) and non-financial (net floor-area bonus) incentives for energy intensive sectors; green building labels; TA & training; positive lists; voluntary targets as a steppingstone towards mandatory commitments

Key Partner/actors:

Governments (central & local): set up EE targets / EEO, monitoring framework, enforcement rules.
Private sector: recipient of mandatory targets

advantages	disadvantages
Very cost-effective tool to scale energy savings across building portfolios	Requires strong institutional capacities for regular updates of the targets and auditing rules
Reinforces long-term political commitment and NDC alignment	Need strict balancing of targets to prevent low-income pricing out

Further information: IEA Setting EE targets; C2ES Energy Efficiency Standards and Targets; GIZ DIAPOL's Innovative EE instruments for the MENA region pages 3-4 (auction systems for EE), 5-6 (mandatory EE targets), 6-9 (utility managed EE programmes)

Pay-per-service (PPS) models: equipment-as-a-service and district service

Description: Pay-per-Service (PPS) models shift focus from owning equipment to paying for the service it provides (e.g., cooling, lighting, heating). A customer pays for the service a product provides (e.g., €/kWh for cooling), not the product itself. Payments are calculated via a fixed cost per unit (e.g., €/kWh). Technology provider installs and maintains the EE equipment. District Service include district heating and cooling.

Examples: Tabreed's Cooling-as-a-Service (CaaS) (MENA, 50+ projects), BASE's CaaS (Africa, 20+ countries), Signify's Light-as-a-Service (LaaS) (global, 10M+ m^2 covered), Empower District Cooling (UAE)

Requirements/Viability:

T: mid - broad portfolio of customers required due to demand uncertainty
F: mid - no upfront capital for customers; providers require high upfront investment and must assess customer credit risk
I: mid - alignment with national legislation; regulatory framework (leasing, service contracts, necessity to be a utility)

Applicability/Use Cases:

R: mid - residential customers (e.g., solar-as-a-service, HVAC-as-a-service for collective buildings)
C: high – big commerce and commercial centers (i.e., cooling as a service)
P: mid - agencies, universities, schools, hospitals, etc.

Support Mechanisms

Payment guarantees (e.g., from governments or MDBs) to reduce provider risk.; Positive lists

Key Partner/actors:

Government: act as customer, or support by enabling/simplifying leasing or service contracts
Private sector: technology provider take part risk.

advantages	disadvantages
Industry leading equipment becomes affordable	New plants or measures might be necessary, increasing costs
Equipment failure does not tangle customers	Alignment with national legislation
Converts capital expenses into operational expenses, freeing up capital	High number of customers needed to generate earnings +long-term contracts (5–15 years) may lock in customers with early termination fees

Further information: 2019 BASE-U4E: Manual of EE FinMechs : pg: 28/40/69; ; EEFIG's Financing Energy Efficiency

Leasing (Green & EEB leasing) – linked to Dealer Financing

Description: one party (lessor) agrees to the use of one's property to another party (lessee) for a specified period in exchange for periodical payments. No upfront capital required. There are 2 different types of leasing: 1) operational, also known as *off-balance sheet* leasing (ownership and risks remain with the lessor and the asset is returned after leasing period; e.g., equipment rental; house lease); and 2) financial aka *on-balance sheet* leasing (ownership remain with the lessor but there is a buying option for the lessee at the end of the leasing period and the risk is partially transferred to the lessee; e.g., equipment loan). When an EEB project involves installation of equipment, lease finance as an option can be explored with the ESCO as the lessor. Leasing is usually available for equipment with available secondary market for the case of the default of the client to recover potential losses.

Examples: EBRD's PolSEFF (Poland €200M+ deployed, 500+ EE leases for SMEs); Green Lease Leaders (US office buildings), PG&E EE Lease (US commercial HVAC leasing)

Requirements/Viability:

T: mid - technical assistance required for lease contract design, EE technology validation, and maintenance planning

F: mid - lessor: high upfront capital required & bears risk of default (requires credit assessment or guarantees); lessee: low capital required, but steady flow of income required to ensure solvency (i.e. to be able to pay back the lease).

I: mid/high - tax/legal and regulatory framework required; additional licensing required by a central bank

Applicability/Use Cases:

R: low - limited for expensive & centralized EE equipment i.e., communal HVAC

C: high - e.g., manufacturing and agriculture

P: mid - energy efficiency upgrades for the public sector (i.e., building HVAC equipment)

Support Mechanisms

Guarantees: decrease risk of default by the end client; Positive lists: validate technologies Accelerated depreciation; EE insurances (and general equipment insurance against failure)

Key Partner/actors:

Technology provider / Financial Institution / Third party (Leasing company) – provides leasing; Governmental regulators –simplify leasing operations

advantages	disadvantages
Low capital, transparent & predictable costs improve cashflow	Relatively complex implementation (lease contract)
Possible to use equipment as collateral	Leased equipment might become obsolete during lease
High EE equipment and maintenance included	Finances only assets
Simple, tax deductible security with low default rates	

Further information: 2019 BASE-U4E: Manual of EE FinMechs : pg: 44/67, Interreg's Financing EE: Leasing, Green Lease; EEFIG's Financing Energy Efficiency

Green/Bulk EE Procurement & Auction Systems

Description: Bulk EE procurement is a market transformation tool that brings EE products to market at scale. It's a demand-driven mechanism; governments or private sector firms issue tenders with a set of qualifying criteria for large quantities of EE products to maximize economies of scale potential with market and tender size; bidders that meet the lowest bidding prices are selected through successive rounds. It is typically used for low-priced, high-quantity products, such as LED lightings.
Dealers/retailers may be excluded to ensure a more competitive bidding as direct participation from manufacturers drives prices down. Criteria may include performance-based metrics (e.g., kWh/year saved, lifetime energy costs), and sometimes contracts include also maintenance. It does not require subsidies, but strong product awareness raising and marketing. **Auction systems** are a specific form of bulk procurement where multiple buyers or sellers compete openly in real-time to set prices and allocate large quantities of goods or services; bulk procurement can also be framed as **EE Obligations** (EEO) and can be coupled with/embedded into **On-bill financing** models. Green/sustainable procurement includes EE criteria and lifecycle cost analysis into public/private purchasing decisions to reduce environmental impact and increase efficiency.

Examples: **EESL** (India); KfW's **SCU-EE** (Egypt); **INARA** (Morocco)

Requirements/Viability:

T: mid - technical assistance needed to define eligibility criteria, standardize bids, and design evaluation frameworks; distribution companies must be involved to ensure market reach.

F: mid - upfront capital required from governments/private firms for bulk purchases; may need blended finance to reduce costs.

I: mid - legal framework conditions need to allow bulk procurement; market size highly matters

Applicability/Use Cases:

R: mid - for end-users through government (EEO) or SOE utilities (i.e., on-bill financing)

C: high - B2B, B2C and self-supply

P: high – coupled with EEO or national sustainable procurement programmes

Support Mechanisms

On-bill financing; Credit guarantees; rebates; tax credits; annuity agreements; Guaranteed savings or ESCO Model, EE Obligations.

Key Partner/actors:

Governments & SOE and sometime private utilities: issue tenders, buy large amounts of products
Private businesses: for higher margins in B2B/B2C trades.
Multilateral Development Banks/agencies: provide technical assistance

advantages	disadvantages
Rebates possible due to high quantities	Limited potential in less developed markets
Increase manufacturing capacities to create sustainable markets	Clear withdrawal and transition plans to avoid market disturbances
Market transformation	Risk of market distortion if subsidies are not phased out gradually or if procurement volumes are too large

Further information: 2019 BASE-U4E: pg: 26/71; 2020 GIZ DIAPOL pages 3-4 (auction systems for EE), CEM Tenders and Reverse Auctions

Positive Lists

Description: a previously agreed upon pre-approved list of sectors, sustainable technologies or technology providers that can benefit from grants, concessional loans, or any other financial instrument. Proceeds and conditions need to be in line with the agreed upon list. Positive lists standardize and simplify procedures for EE financing and procurement: they often include eligibility criteria, standardized methodologies, and implementation guidelines.

Examples: EBRD GEFF **Technology Selector** (Global), **EE lists** (EU), Energy STAR **Product Finder** (US), **Energy Technology List** (UK)

Requirements/Viability:

T: mid – relatively easy to use in mature markets, but require good technical understanding (e.g., EE standards) and regular updates to reflect technology advancements

F: high – do not require additional finance and can include tenders for consultants to set up the web-based positive list database

I: mid - detailed assessment and stakeholder engagement required; regular updates are necessary to avoid obsolescence, leading to high administrative effort.

Applicability/Use Cases:

R: high - EE equipment and EE for residential buildings (retrofits, insulation, HVAC, etc); can be combined with many other mechanisms

C: high – same as above; can be combined with practically all other financial mechanisms.

P: high – same as above; especially relevant for public bulk or auction-based procurement

Support Mechanisms

Positive lists are themselves a support mechanism that is highly applicable to all EEB FinMechs: green loans, credit lines, revolving loan funds, insurance, guarantees, leasing models, microfinance etc. The advantage is that it strongly standardizes processes.

Key Partner/actors (that can issue positive lists)

Governments: require long-term commitment and resources to update lists at least annually. Technology providers, business associations and Financial institutions (LFIs, PFIs, MDBs, etc.) to provide inputs to the lists and help maintaining them.

advantages	disadvantages
Offer clarity and simplicity on eligible EEB projects, products, technologies.	Might create discrimination if not designed inclusively (e.g., exclude certain technologies or suppliers).
Can be adjusted to control growth of EEB investments	Lists need to be regularly updated and maintained to avoid becoming obsolete.

Further information: 2019 BASE-U4E: Manual of EE FinMechs : pg: 21

Energy performance contracts (EPC) / Energy Service Companies (ESCOs) / Super ESCOs

Description: an Energy Service Company (ESCO) implements an EE project and uses income from cost savings to repay the investment. There are two main models: (1) Shared savings model: ESCO bears performance risk; cost savings are shared between ESCO and client (e.g., 80/20 split); and (2) Guaranteed savings model: ESCO guarantees specific savings; if shortfall occurs, ESCO compensates client for the difference. This way, performance risk is transferred to the ESCO; credit risk may (or may not) remain with the client.

Note: Super ESCOs are public or private entities that can facilitate the upscaling and development of ESCO markets via large scale implementation of EE projects, directly financing or providing technical assistance to ESCOs

Examples: ESCO can work either locally or internationally. Can be equipment affiliated (NORESCO – Carrier, Honeywell Building Solutions SES, Johnson Controls Government Systems, Schneider Electric, Siemens Government Services, Inc., etc.), utility affiliated or independent. Super-ESCOS can be public, private, PPPs, and can be geared towards servicing public facilities or private ones: Energy Efficiency Services Limited – EESL (India); Etihad ESCO (Dubai); Tarshid (Saudi Arabia). In some markets, ESCO associations have developed on national (e.g. ANESCO Chile), or global level (the Global ESCO Network).

Requirements/Viability:

T: mid – developing an ESCO market is complex and requires in-country expertise (e.g., trained ESCOs, standardized contracts, etc.)
F: mid - loan applicability and affordability required;
I: low – regulatory and institutional frameworks are needed, with strong private sector participation for success

Applicability/Use Cases:

R: low –limited to multi-family buildings or aggregated residential projects
C: mid - HVAC equipment, insulations, pumping, retrofitting;
P: mid - same as above + public lighting projects, etc.

Support Mechanisms

For all models: Guarantees; positive lists, Energy Savings Insurance; EPCs.
For shared savings: Sale and leaseback
For guaranteed savings: Regulatory framework, Standardized contracts; Insurances

Key Partner/actors:

ESCOs/Super ESCOs: service providers, financing, technical assistance
Governments: legal framework providers; market creator; mobilize capital
Financial Institutions: provide support with loans & guarantees

advantages	disadvantages
No performance risk and necessity for technical knowledge of customers	High risk of debt if regulatory framework unclear or ESCOs are not managed well
Promote state of the art equipment, as ESCO want to increase savings as much as possible	Misinformation and miscommunication as savings translate in more initial cost before generating net savings
No need for investments beforehand	Uncertainties about performance
	Long payback periods (5–10 years) may deter some clients, especially in high-discount-rate contexts

Further information: 2019 BASE-U4E: Manual of EE FinMechs pg 48/62; GIZ DIAPOL's Innovative EE instruments for the MENA region pg. 19-21 (Super ESCOs); 2026 ECONOLER Super ESCO guide; EEFIG's Financing Energy Efficiency; CEM's Performance contracting and ESCOs; IEA ESCOs

White Certificate / Energy Savings Certificates (ESC)

Description: certification of an established amount of verified energy savings achieved, relative to a baseline (e.g., pre-retrofit consumption) calculated as the cumulative savings over the lifetime of the product or service, and that can be then traded as a white certificate or an ESC. They can be mandatory (e.g., EU EED Article 7) or voluntary (e.g., Poland's system). ESCs can be linked to EPCs and ESCO models (e.g., ESCOs generate ESC for achieved savings that can subsequently be traded).

Examples: Energy Company Obligation (ECO) (UK, 2013–present – mandatory, 10M+ households upgraded); Italy White Certificates (Italy, 2005–present – mandatory, 1M+ certificates issued; Certificats d'Économies d'Énergie (CEE) (France, 2006-present – mandatory, 200+ TWh saved); Energy Savings Certificates (Denmark, 2006–2020 - voluntary, phased out); Perform, Achieve, and Trade (PAT) Scheme (India, applicable to commercial buildings)

Requirements/Viability:

T: low – requires high technical know-how and heavy design efforts (e.g., baseline setting, MRV protocols)
F: mid- if T and I are developed, the certificate will have a market ,and financial viability will be achieved
I: low – requires specific legal framework; operating institution to issue certificates and regulate the market; political willingness

Applicability/Use Cases:

R: limited – utility investments in household EE (thermal insulation, EE appliances, etc.)
C: high - beneficiaries are companies (utilities; energy intensive sectors; ESCOs)
P: not applicable

Support Mechanisms

Green loans; Guarantees; ESCO models; EPCs; Positive lists; Labels

Key Partner/actors:

Governments: issued certificates, regulate market
Utilities: can benefit directly from ESC (commercial) but often are intermediaries (residential)
Energy intensive companies and household owners/residents are the main beneficiaries

advantages	disadvantages
Create new markets & business models (i.e. ESCO)	Not accessible to all customers
ESC can be transacted generating additional income & lowering payback periods	High administrative cost for certification & verification (e.g., third-party audits); requires high involvement and buy-in from the public sector
	Limited to specific technologies (e.g., those with measurable, verifiable savings)

Further information: 2019 BASE-U4E: Manual of EE FinMechs : pg: 52; CEM's Tradeable certificates; White certificates as a tool to promote energy efficiency in industry (eceee.org); What is a white certificate? – KYOS; EECs - greeners

Carbon Finance

Description: Finance generated from the transfer of carbon credits representing verified GHG emission reductions in EEB projects; additionality (proof that savings would not occur without carbon revenue) is required.
Under Article 6.2 of the Paris Agreement, host countries authorize Internationally Transferred Mitigation Outcomes (ITMOs) via bilateral agreements.
Under Article 6.4, the UNFCCC Supervisory Body oversees a centralized crediting mechanism that generates tradeable carbon credits.
Voluntary carbon markets (VCMs) enable private sector participation through voluntary standards like Verra's VCS or Gold Standard (GS), while CORSIA (Carbon Offsetting and Reduction Scheme for International Aviation) allows airlines to offset emissions using eligible carbon credits. Both can include credits from EEB. All these carbon finance alternatives seek to bridge the viability gap of EEB projects by monetizing emission reductions from EEB (new green buildings vs baseline, retrofits, HVAC upgrades, new low-carbon materials, integrated building systems, etc.). Given the high complexity and transaction costs of such mechanism, aggregation of multiple building units is key to achieving the project scale required to make carbon finance cost-effective.

Examples: PEEB Climate Finance Incubator - Art6 EEB pilots (Morocco, Indonesia, Nigeria); Gold Standard EEB methodology (NCM142); Verra VCS Building Retrofit Credits (VM0008); Low-carbon hotels JCM (Vietnam); CFL Residential Retrofit CDM Programme of Activities (Nigeria)

Requirements/Viability:

T: low – requires high complexity MRV systems, baseline setting, additionality proofs, and aggregation strategies (essential for cost-effectiveness)
F: mid – carbon revenues improve project IRR; credit prices and Art.6 market liquidity are highly volatile; upfront costs (e.g., MRV, validation) significant.
I: low – requires host country participation in Article 6 framework; ITMO authorization systems and enabling national policies must be in place; NDC alignment critical

Applicability/Use Cases:

R: mid – residential retrofit programmes can be aggregated to generate credits; no applicability for individual household except via aggregators
C: high – commercial and industrial building retrofits offer large, measurable emission reductions well-suited for Article 6 crediting
P: high – public building programmes (schools, hospitals, offices) are ideal: large floor areas, government ownership, and clear ownership simplify MRV and aggregation

Support Mechanisms

Building GHG baselines and standardized MRV frameworks; Technical Assistance for project development; Guarantees to attract private co-financing; Green credit lines; Blended Finance

Key Partner/actors:

Host country governments: authorize Article 6 transfers, set enabling policy framework
MDBs and development agencies (PEEB/GIZ, AFD, GCF): technical assistance, capacity building
Carbon credit buyers (buyer countries, corporates): provide demand for ITMOs and credits
Independent verification bodies: certify emission reductions
Project developers / ESCOs: implement EEB measures and manage MRV

advantages	disadvantages
Additional revenue stream that improves viability	Complex MRV and project development; high transaction costs
Links EEB investment to countries' NDC targets	Article 6 demand still evolving; volatile prices ($5-50/tCO2eq) create uncertainty risk for projects
Catalyses private co-financing by monetising carbon value of EEB investments	Requires strong institutional capacity in host country; demonstrating additionality can be challenging, especially for policy-driven EEB projects.

Further information: 2025 PEEB Article 6 Handbook; UNFCCC Article 6 Rulebook; 2026 PEEB GHG Baseline Calculation Guide; 2021 UNFCCC Compendium on GHG for Building Sector

EEB Tax incentives

Description: EEB tax incentives encourage energy-efficient practices and investments by reducing tax liabilities or costs. Types include:

- Tax credits: direct reduction in tax liability, e.g., 20–30% of EEB investment
- Tax deductions: reduce taxable income, e.g., accelerated depreciation for EEB assets
- VAT exemptions/reductions : lower consumption taxes on EEB products, e.g. reduced or zero-rated VAT for high-EE appliances/building materials such as insulation, LED lighting, etc.
- Import duty exemptions : reduce tariffs on EE equipment, e.g. exemptions or reductions on solar panels, heat pumps, etc.

Examples: EU Green Taxation, Section 12L (South Africa, commercial buildings income tax deduction), PCES (Mexico, commercial and residential buildings property and payroll tax reductions), Alliance to Save Energy's tax proposals (US)

Requirements/Viability:

T: mid - institutional & technical capacities required to design and implement effective tax schemes (e.g., defining eligible technologies & incentive levels)

F: mid - tax incentives require government revenue streams (e.g., general taxation) or revenue-neutral schemes (e.g., bonus-malus: tax increases on inefficient products can fund rebates for efficient ones)

I: mid - requires well structured tax collection; policies; developed markets; transparency of players; advanced taxation system

Applicability/Use Cases:

R: mid - retrofits, EE equipment, insulations etc.

C: mid - especially corporate tax credits, deductions and exemptions,

P: null - not applicable

Support Mechanisms

Long-term supporting policies; labeling schemes (e.g., Energy STAR, green building labels) and minimum energy performance standards (MEPS) to define eligibility;

Key Partner/actors:

Governments: evaluate certain technologies and set possible tax credits;
Municipalities: PACE: assess tax collection structure in order to structure PACE compatibility.

advantages	disadvantages
Low interest rates	Distribution of money from taxes not for EE
Reduces energy poverty & can benefit low-income households (e.g., VAT exemptions on essential EE products).	Less efficient than grants; it may disproportionately benefit high-income households or large corporations (e.g., tax credits are more valuable to those with higher tax liabilities)
	Increases the complexity of the tax system (e.g., requires additional reporting and compliance checks).

Further information: 2019 BASE-U4E: Manual of EE FinMechs pg. 33; GIZ DIAPOL's Innovative EE instruments for the MENA region pg. 18, CEM: Tax incentives

Public-Private-Partnerships (PPP)

Description: Public-Private Partnerships (PPPs) are long-term arrangements (typically 20+ years) between public and private sectors, where the private sector designs, builds, finances, and operates public assets. The private sector constructs, maintains, and operates the project (a public asset), raises funding (usually via project finance), and receives payments from the public sector as the primary revenue source. The goal is to minimize lifetime costs of public assets by leveraging competitive markets and private sector efficiency. Cost of capital is higher than if the public sector had funded the project itself, but higher efficiencies occur elsewhere (design, implementation, operation).
Debt & Equity are the primary financing instruments used by the private consortium (often via a Special Purpose Vehicle or SPV) to build the asset. Grants or subsidies are frequently used as public financial support to make economically vital projects commercially viable. Risk mitigation mechanisms (such as government guarantees or offtake agreements) are core structural features negotiated into the contract to shift specific risks (demand, political, or currency risk) to the party best able to manage them.

Examples: Inova BH (Brazil School PPP); GreenCape (South Africa Commercial PACE pilot); ESCOs/Super-ESCOs.

Requirements/Viability:

T: low - complexity of arrangements, requires clear technical assistance (e.g., for contract design, risk allocation, performance monitoring).
F: mid - higher cost of capital for the public sector (vs. direct public financing); requires public sector creditworthiness to attract private partners
I: mid - clear legal framework necessary; as well as transparency and perception of public service

Applicability/Use Cases:

R: low – applicable only to social housing or multi-family buildings with public support
C: high– applicable to district cooling/heating & commercial (e.g., office buildings, shopping malls
P: high – applicable to public buildings (e.g., schools, hospitals, street lighting), infrastructure proj

Support Mechanisms

Green credit lines; ESCOs; Private Equity

Key Partner/actors:

Government policymakers: set up legal frameworks & supplement funding (e.g., viability gap funding
Public works departments: Identify and prioritize suitable projects
Private sector partner: secures project financing; constructs and maintains/operation of the project

advantages	disadvantages
Sharing risks and costs optimally between public and private sector	Very complex tool
Private capital instead of public capital is allocated	Public sector may lack capacity to negotiate and manage complex PPP contracts
Accelerates project delivery (e.g., 2–3x faster than public-only projects) by leveraging private sector efficiency	Risky for the private sector if contracts are poorly designed (e.g., unclear risk allocation, inadequate revenue guarantees)

Further information: 2019 BASE-U4E: Manual of EE FinMechs : pg: 59, CEM: Green Banks; develoPPP

Remittance-based payment models

Description: Remittance-based payment models channel a portion of migrant workers' remittances toward investments in sustainable energy products for their families or communities. A portion of the remittance is directly transferred to purchase energy efficiency equipment, which is then sent to the recipient. In 2023, global remittances reached $800B+ (World Bank) – 3x global Official Development Assistance (ODA) ($200B). The potential for remittance-based models is huge and mainly untapped to date.

Examples: CEMEX Patrimonio Hoy (Mexico residential microfinance – 2.3M beneficiaries); EBRD GEFF Remittance-backed Green Loans (Tajikistan rural residential retrofits); M-KOPA Diaspora PAYG (Kenya/East Africa home solar and solar EE appliances); Solarise Africa (East & South Africa remittance-linked solar financing for diaspora communities)

Requirements/Viability:

T: mid - engaging migrant workers to invest a portion of their remittances in EEB solutions (e.g., via awareness campaigns, financial literacy programmes)

F: mid - requires existing finance channels (e.g., partnerships with MFIs, fintech platforms, or energy product suppliers) to facilitate purchases

I: mid - very new model, no high visibility, more programmes need to be set up; BASE is currently one of very few providers

Applicability/Use Cases:

R: mid - energy efficient equipment (lighting, cooling, HVAC) and solar technologies (e.g., PV systems, solar water heaters) for households."

C: null - not applicable

P: null - not applicable

Support Mechanisms

Microfinance loans; Saving groups

Key Partner/actors:

Microfinance institutes: provide financing

Governments: setting up the remittance model

Development agencies: setting up the remittance model

Money transfer organizations (MTO): enable finance transfers

advantages	disadvantages
Tackles the problem of misuse of remittance resulting in higher instead of lower energy use	Limited to countries with high remittance inflows (e.g., Philippines, Mexico, Egypt, Morocco) and concentrated migrant communities.
Enables direct contributions to sustainable development	Concentration of remittance workers to justify the set up of a model.
Overcome upfront capital for EEB investments	Exposed to currency exchange risks if remittances are in foreign currency.

Further information: 2019 BASE-U4E: Manual of EE FinMechs : pg: 16/40/61



Financing Glossary and Abbreviations

Finance Glossary

AML	Anti-money laundering: due diligence done in relation to a particular financial transaction, asset, or fund to ensure is not used for illicit purposes
Asset	Any resource that can be used to generate economic value and that is owned by an entity. An asset represents an active value of ownership
B2B	Business to business
B2C	Business to Consumer
Blended Finance	Structuring approach that combines concessional public or philanthropic funds with commercial private capital in a single financing vehicle, to unlock investment in contexts where risk-return profiles would otherwise deter private investors
Bond (green bond)	Investment debt securities where an investor lends money to a company or a government for a set period of time, in exchange for regular interest payments. Once the bond reaches maturity, the bond issuer returns the investor's money. Green bonds are specifically designated to finance environmentally friendly (i.e., green) projects
Carbon finance	Set of financial instruments, investments, and market mechanisms (such as carbon pricing and carbon trading) designed to channel funds into greenhouse gases (GHG) emission reduction or removal (aka climate mitigation) projects
CFT	Combating the Financing of Terrorism: set of laws, regulations, and practices intended to restrict financial access to terrorists
Collateral	Asset of value used to secure a loan. If a borrower defaults, the lender can seize the collateral to recoup its losses
Commercial (C)	Commercial sector: businesses, industries, and manufacturing enterprises operating for profit.
Concessional/soft loans	Loan given with interest below market rate and extended grace periods, used generally for development purposes
Credit	Acquiring something with the promise of paying back at a later point in time; it usually consists of a principal and an interest
CSO	Civil Society Organisation
Debt	Something that is owed to someone else, but oneself; one party owes something to another party
Default	Failure to repay a dept including interest or principal
Due diligence	Form of an investigation, or review to confirm facts or details
Economies of scale	Cost advantages reaped when production becomes efficient, usually with higher quantities in production, lowering fixed costs
EE	Energy Efficiency
EEB	Energy Efficiency in Buildings
Equity	Shares of a company, that are owned by the shareholders: each share has the same value
ESCOs	Energy Service Companies
Financial Viability (F)	Assessment of the complexity and easiness for the EEB FinMech to be put in place from a financial standpoint
Fund	Pool of money reserved for one specific purpose
Grant	Gift to an individual, institution or company that does not need to be paid back
Guarantee	Promise to cover debt in case of default
Hedge	Investment with the intention of reducing the risk of an asset
IFI	International Financial Institutions

Finance Glossary

Insurances	Promise of a sum of money, if certain criteria are met, usually in event of loss
Institutional Viability (I)	Assessment of the complexity and easiness for the EE to be put in place from institutional, regulatory and political standpoint
Interest	Monetary charge for borrowing money; normally expressed as a percentage
IRR	Internal Rates of Return: expected annual rate of growth of an investment
KYC	Know Your Customer: due diligence done by financial institutions towards the potential recipient of a financial product
Leasing	One party rents an asset for its use (property, real estate, equipment, vehicles etc.) without giving up ownership.
LFI	Local Financial Institution: local Banks etc.
Loan (green loan)	Money is given to another party in exchange for repayment of the loan principal amount plus interest. Green loans are loans meant for sustainable, environmentally friendly purposes contributing to green transition (including energy efficiency)
MDB	Multilateral Development Bank
M&E	Monitoring & Evaluation
Mortgage	Loan used to purchase or maintain a home, where the property serves as collateral
MRV	Monitoring, Reporting and Verification
MSME	Micro, Small and Medium Enterprises.
NDB	National Development Bank
NBFI	Non-banking financial institutions do not have a full banking license and cannot accept deposits from the public, but facilitate alternative financial services, such as investment, risk pooling, financial consulting, brokering, money transmission, leasing or check cashing.
NGO	Non-Governmental Organization
Public (P)	Public sector: the part of an economy that is controlled by the state (public services and public enterprises).
P2P lending	credit issued directly from person to person, without a financing institution as intermediary, by using an online marketplace
PbP	Payback period: the amount of time it takes for an investment to refund itself
PFI	Public Financial Institutions
PPP	Public Private Partnerships
Principal	Original sum of money borrowed in a loan
Project finance	Financing of infrastructure and industrial projects via the planning of projected future cash flows of said project
Residential (R)	Residential sector: households (single and multi-family residences)
Remittance	Personal monetary transfers that a migrant worker makes from abroad to his/her relatives or community in their country of origin
Security	Fungible, negotiable & tradeable financial instrument that represents some type of financial value, in the form of a stock, bond, or option
TA	Technical Assistance (support for technical and capacity building aspects, i.e., legal/regulatory/institutional support, training, etc.)
Technical Viability (T)	Assessment of the technical complexity and easiness for the EEB FinMech to be put in place from a technical standpoint
Utility	an organization supplying the community with public services i.e., electricity, gas, water, sewerage, garbage collection, etc.
VA(s)	Voluntary agreement(s)

EEB Financial Mechanisms Manual

PEEB
PARTNERSHIP FOR ENERGY EFFICIENCY IN BUILDINGS



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PEEB is a Partnership dedicated to promoting Energy Efficiency in Buildings. PEEB is currently funded by the German Federal Ministry for the Environment, Climate Action, Nature Conservation, and Nuclear Safety (BMUKN), the French Ministry of Ecological Transition and Territorial Cohesion (MTE), the Green Climate Fund (GCF), the European Union (EU), the Agence Française de Développement (AFD), the International Climate Initiative (IKI), and the Fonds Français pour l'Environnement Mondial (FFEM). The Partnership is part of the Global Alliance for Buildings and Construction (GlobalABC).

PEEB is implemented by the Agence Française de Développement (AFD), the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, and the French Agency for Ecological Transition (ADEME).

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Published
November 2026

Funded by