

Risk mitigation instruments – Experience with guarantees and insurance for energy efficiency



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Working paper



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Guarantees and other risk mitigation instruments for clean energy

Harnessing blended finance to scale investments in emerging markets and developing economies

KEY CONSIDERATIONS & FACTS

- **High clean energy investment needs:** Achieving the UAE Consensus goals by 2030 requires cumulative clean energy investments of **USD 31.5 trillion** between 2024 and 2030 ([IRENA, 2024](#)).
- **Underinvestment in EMDEs:** Less than 10% of 2024 clean energy investment growth targeted EMDEs outside China ([IEA, 2025](#)).
- **Guarantees' high leverage potential:** Increased interest in risk mitigation instruments to mobilise private capital at scale due to strained public budgets and cuts in Official Development Assistance.

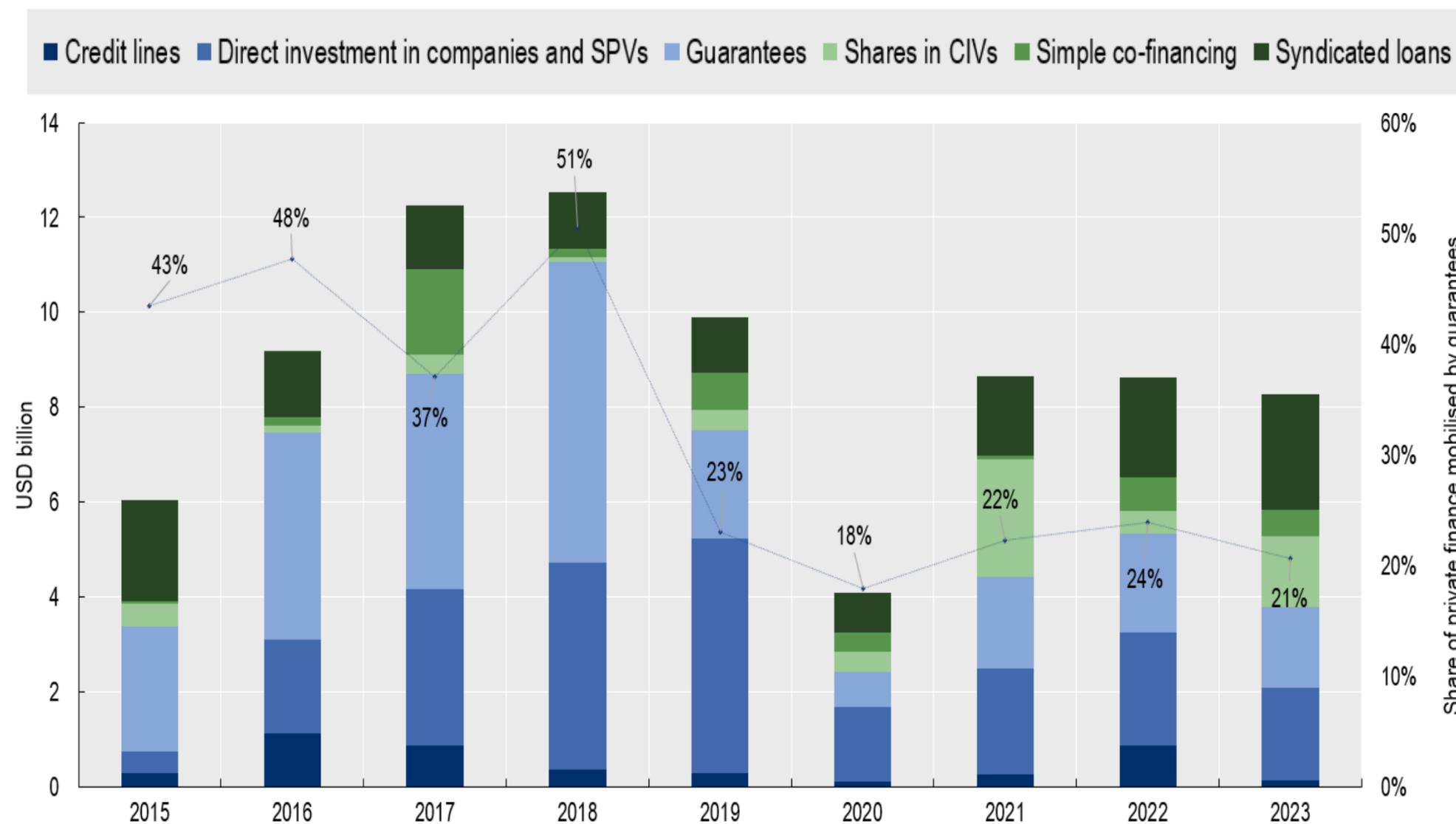


LATEST TRENDS AND MARKET DEVELOPMENTS



- **Guarantees remain underutilised.**
- **Until 2018, guarantees were the financing instrument that mobilised the highest share of private finance for clean energy projects.** Since 2019, their use declined significantly (OECD).
- Guarantees and insurance mainly focus on **large-scale transactions, especially for renewables** (Convergence Blended Finance).
- Their **application in energy efficiency remains limited.**

Private finance mobilised for clean energy by official development finance interventions



Source: OECD DAC data on private finance mobilised through official development finance interventions
<http://data-explorer.oecd.org/s/q>

OVERVIEW OF INSTRUMENTS AND CASE STUDIES



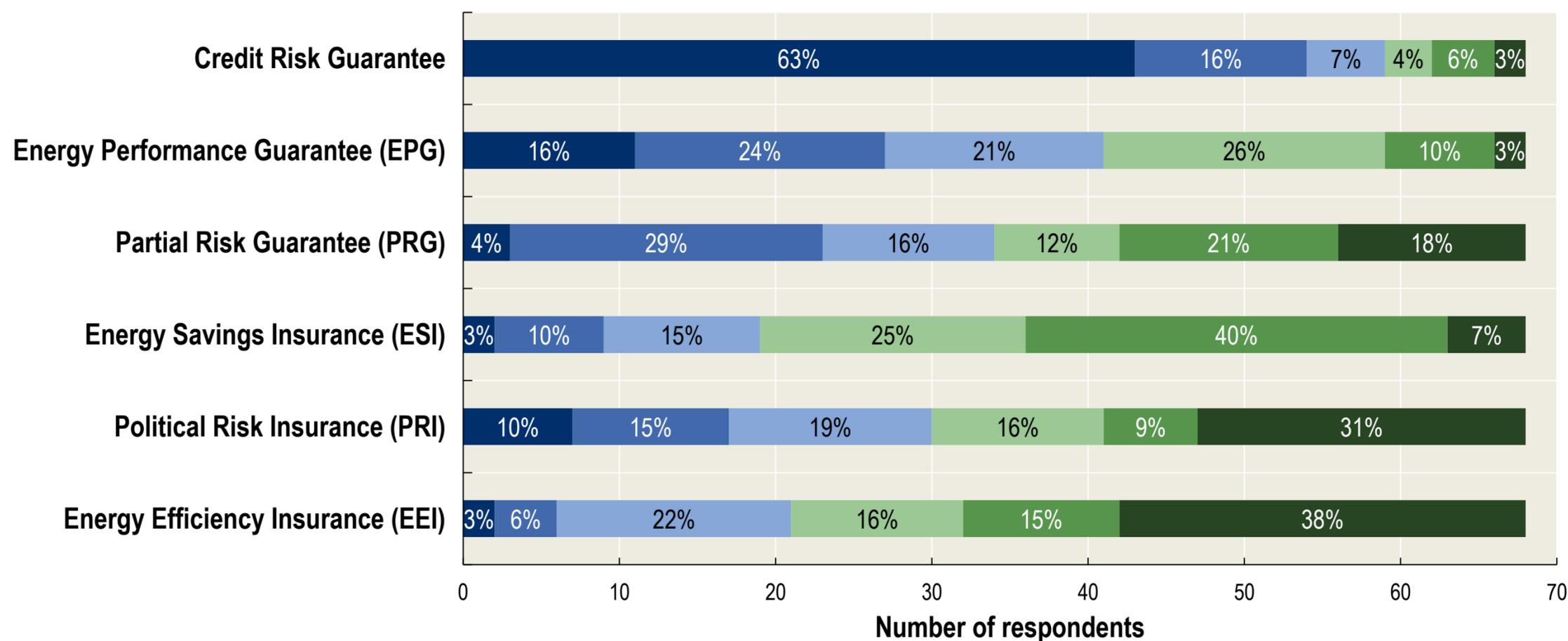
Type of Guarantee / Risk mitigation instrument	Risk Coverage	Case study
Partial credit guarantees (PCGs)	<ul style="list-style-type: none"> • Nonpayment by the borrower/ issuer. • Local or hard currency. • Single transaction or a portfolio. • First loss or senior coverage. 	<ul style="list-style-type: none"> • GuarantCo PCG (Pakistan) • MIGA (Indonesia) • Sida guarantee for EMDE debt fund; • PRSF (India) • InvestEU first loss to EBRD (Croatia) • Sovereign guarantees (South Africa)
Partial Risk Guarantee (PRG)	Non-honoring of financial obligations and other risks	Bpifrance PRG for CPPA (France)
Political Risk Insurance (PRI)	Currency inconvertibility and transfer restriction	MIGA (Saint Lucia)
	Breach of contract	
	Expropriation	
	War, terrorism, and civil disturbance	
Currency risk hedging	Foreign exchange risk	Examples discussed in the paper.
Put and Call Option Agreement (PCOA)	Right to sell power plants to host government in case of default on contractual obligations by the government	Government of Chad PCOA
Energy Performance Guarantees (EPGs)	Energy savings performance risk	Discussed within the ESI case study
Energy Saving Insurance (ESI)	Energy savings and borrower credit risk	ESI in Colombia
Energy Efficiency Insurance (EEI)	Energy savings, material damage, loss of revenue and borrower credit risk	EEI in the UK



SURVEY FINDINGS



- **Credit risk guarantees are considered the most relevant tool for both RE and EE investments.**
- For energy efficiency, **energy performance guarantees (EPG)** are the second most relevant instrument, followed by partial risk guarantees (PRG).



Example 1: Partial Risk Sharing Facility in India



Aim

- Created in 2015 to improve access to finance for ESCOs, minimise risk perception of local banks and mobilise over USD 125 million commercial financing for energy efficiency

Instrument

- Component 1: Partial Risk Sharing Facility for EE (USD 37 million):
Partial credit guarantees to participating FIs (up to 75% coverage of loan amount), portfolio effect
- Component 2: Technical Assistance and Capacity Building (USD 6 million)
- Eligible hosts & sectors: large industries, MSMEs, municipalities, buildings

Results & learnings

- 2015-2024: 79 guarantees issued, mobilising total investment of USD 132 million; 2 guarantee claims received
- Technical Assistance and Capacity Building on supply and demand side were critical success factors,

Example 2: Political Risk Insurance Saint Lucia



Aim

- De-risk a national streetlight modernisation initiative (equipping all streetlights with LEDs) implemented through a PPP

Instrument

- Political Risk Insurance by MIGA on
 - A private equity investment and retained earnings (max 15 years)
 - A commercial loan and future interest (max 8 years)
 - Against risks of expropriation, breach of contract and transfer restrictions

Results & learnings

- Almost 25 000 LEDs installed for the entire public lighting systems
Expected savings of 6.8 GWh per year
- PRI derisked both private equity and commercial loan, enabling capital inflows into green infrastructure in a small market with limited sovereign creditworthiness
Effective PPP design can accelerate delivery

RISK MITIGATION INSTRUMENTS FOR ENERGY EFFICIENCY PROJECTS



- **Partial credit guarantees**, particularly in local currency and as portfolio guarantees, can unlock domestic financing, and help local financial institutions build experience and data on energy efficiency projects.
- **Political risk insurance** mitigates government and regulatory uncertainties in unstable markets, safeguarding payments from long-term savings and enabling access to concessional finance.
- **Energy saving insurance** unlocks financing for SMEs and small-scale projects, due to its combination with standardised energy performance contracts, independent validation, and dedicated (often concessional) financing.
- **Energy efficiency insurance** removes technical uncertainty for lenders and enhances credit quality, though it typically lacks complementary support measures and targets specific sectors.

LIMITATIONS AND BARRIERS



Remaining structural risks

- Guarantees and risk mitigation do not fundamentally resolve structural credit risks and they cannot substitute a strong policy environment.

Regulatory treatment of guarantees

- The current regulatory treatment of guarantees can pose limits to their use, as the capital relief provided by guarantees can vary significantly across jurisdictions, types of users and instruments.

Pricing mismatches

- Commercial financiers' reliance on market benchmarks might imply that the pricing of financial products does not always fully account for the reduced risk provided by guarantees.

Loan predominance

- MDBs and DFIs tend to prioritise loans over other financial instruments due to misaligned incentives or business model.

KEY RECOMMENDATIONS

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- **Guarantees should be deployed strategically to de-risk high-impact clean energy projects.**
 - **Donors, DFIs, and MDBs should scale up portfolio approaches and strengthen coordination and capacity**
 - **EMDE governments should strengthen regulatory and institutional frameworks**
 - **Financial regulators should adjust the technical interpretation and implementation of the regulatory frameworks**

➤ For more information about the OECD Clean Energy Finance and Investment Mobilisation (CEFIM) Programme: www.oecd.org/cefim

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