National Dialogue on Industrial Decarbonization

Renewable Energy as a Competitiveness Strategy for Industrial Decarbonization in Bangladesh's RMG Sector

Centre for Policy Dialogue

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1. Introduction

1. Introduction

Background: RMG and Carbon Lock-in

- Bangladesh's RMG sector faces increasing pressure to reduce carbon emissions while maintaining global competitiveness.
- Industrial decarbonization has become essential to meet climate commitments and respond to growing buyer demand for low-carbon production.
- Structural carbon lock-in, driven by technological, financial, institutional, and behavioural barriers, continues to constrain the transition.
- To examine these challenges, the Centre for Policy Dialogue (CPD) conducted a study covering 350 RMG factories, combining factory surveys, energy modelling, machine substitution analysis, renewable energy scenarios, and stakeholder consultations.
- The findings show that deep industrial decarbonization requires coordinated technological, financial, institutional, and policy interventions beyond incremental energy efficiency improvements.
- Based on this evidence, the study proposes strategic pathways to accelerate renewable energy adoption and strengthen the long-term competitiveness of Bangladesh's RMG sector.

1. Introduction

Background: RMG and Carbon Lock-in

- RMG accounts for 15.4% of Bangladesh's total GHG emissions and has pledged a 30% emissions reduction by 2030 under the UN climate charter

- European Green Deal standards and Bangladesh's approaching LDC graduation raise the stakes for compliance and market access

- The sector is systematically locked into carbon-intensive production, a Techno-Institutional Complex in which technology, infrastructure, regulation, and markets mutually reinforce fossil dependence (Unruh, 2000)

- A companion CPD study of 350 factories (CPD, 2026) finds decarbonization to date has been incremental rather than structural such as LED lighting, servo motors, passive measures —*Core production technologies, thermal processes, and energy systems remain largely untouched*

- Escaping lock-in requires structural transformation, not incremental adjustment

1. Introduction

Objectives of the Study

1. Examine the structural drivers of carbon lock-in in the RMG sector
2. Quantify factory-level energy intensity, machine-type efficiency heterogeneity, and sector-wide energy-saving potential
3. Evaluate the financial and institutional conditions shaping renewable energy adoption
4. Assess how renewable energy pathways can improve cost predictability and reduce exposure to LNG price volatility
5. Develop an integrated technological, financial, and institutional strategy for structural emissions reduction

2. Why Decarbonization Now

2. Why Decarbonization Now

Cost and Market Pressures

- Energy import dependence: growing reliance on imported LNG exposes industrial production to price volatility, FX pressure, and supply shocks
- Renewable cost advantage: falling levelized cost of solar PV offers stable, predictable pricing with low exposure to fuel-price fluctuation
- Bangladesh's industrial sector has considerable rooftop solar potential with short payback periods
- Stable energy pricing enhances cost predictability and strengthens competitiveness in global value chains

Buyer Pressure and Lock-in Risk

- Global buyers and brands are adopting supply-chain decarbonization commitments, extending Scope 3 emissions pressure to suppliers
- The EU Carbon Border Adjustment Mechanism signals a shift toward carbon-sensitive trade regimes
- Continued reliance on fossil-based industrial infrastructure risks stranded assets as global production systems transition
- Renewable energy is framed not only as an environmental requirement but as a strategic instrument for competitiveness and long-term resilience

3. Analytical Framework

3. Analytical Framework

Competitiveness Through Energy Transition

- Decarbonization is conceptualised as a strategic transformation of firms' energy mix, not merely a technological redesign of production
- Framework draws on Porter's (1990) national competitive advantage model, adapted to argue renewable adoption strengthens competitiveness via cost stability and reduced volatility exposure
- Four interacting domains shape adoption outcomes:
    - Energy transition and technological lock-in
    - Demand and regulatory pressures
    - Financial and investment behaviour
    - Institutional and governance structure

3. Analytical Framework

Competitiveness Through Energy Transition

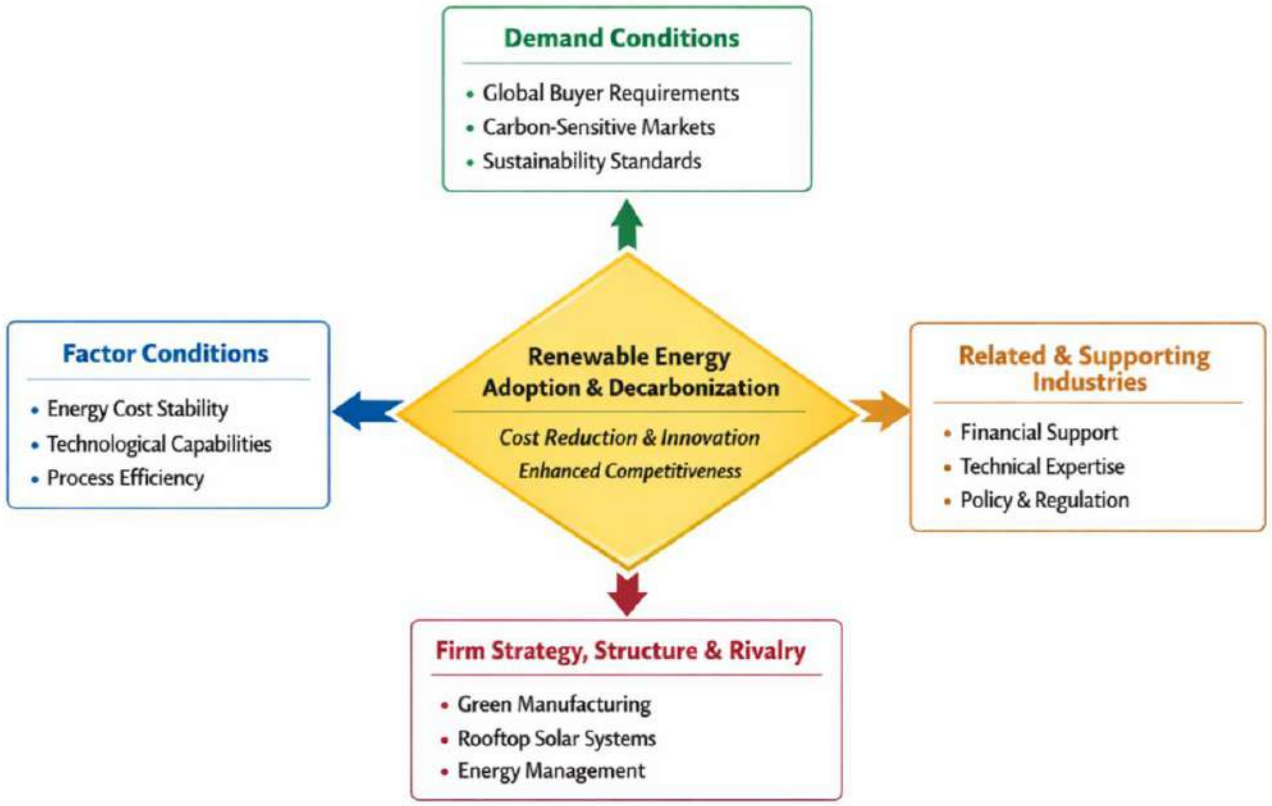

Figure 1: Renewable Energy and Competitive Advantage in Bangladesh's RMG Sector

Source: Adapted from Porter's Diamond Model.

4. Methodology

4. Methodology

A Four-Module Empirical Approach

- Central innovation: machine specifications are estimated econometrically from observed factory data, not taken from manufacturer ratings
- ***Module 1 :*** Baseline energy intensity and frontier saving potential for each factory
- ***Module 2 :*** Two-stage calibration of an empirical production function (category-level, then machine-type-level) plus a translog Cobb-Douglas model of capital–labour–energy substitution
- ***Module 3 :*** Empirical irreplaceability scoring and substitution-set identification from cross-factory variation
- ***Module 4 :*** Factory-level, energy-minimising linear programme that preserves output and labour productivity
- Results are aggregated to sector level and validated against a stochastic frontier model

4. Methodology

Data and Sample

- Primary quantitative data from 350 RMG factories, the largest factory-level production and energy dataset assembled for this sector
- 65 distinct machine types across 8 production categories: cutting, sewing, embroidery, finishing, printing, washing & dyeing, packing, and specialised support
- Cost and scenario analysis of renewable energy, including a Monte Carlo simulation of energy price volatility
- Qualitative triangulation through Key Informant Interviews (factory owners, energy managers, financial institutions, buyers) and one Expert Group Meeting
- Qualitative evidence is used to interpret and validate the quantitative modelling results

4. Methodology

Data and Sample

Table 1: Distribution of the Surveyed Factories

District	Factory Size	Knit	Woven	Knit x Woven	Sweater	Knit Composite	Total
Chattogram	Small	5	6	11	3	–	25
	Medium	4	3	6	0	–	13
	Big	1	1	0	0	–	2
	Total	10	10	17	3	–	40
Dhaka	Small	27	31	14	16	0	88
	Medium	8	25	7	8	1	49
	Big	2	5	2	0	1	10
	Total	37	61	23	24	2	147
Gazipur	Small	20	13	6	19	1	59
	Medium	16	22	5	13	4	60
	Big	3	6	1	2	4	16
	Total	39	41	12	34	9	135
Narayanganj	Small	31	4	2	3	2	42
	Medium	10	3	1	4	3	21
	Big	0	0	0	1	0	1
	Total	41	7	3	8	5	64

Source: Author's Calculation

4. Methodology

Data and Sample

Table 2: Distribution of Machine Types across Sections

Production Section	No. of Machine Types	Machine Types
Cutting	**10**	Straight knife; Round knife; Band knife; Computerized knife; Laser cutting; End cutter; Notching machine; Die cutting; Drill machine; Other cutting machines
Sewing	**18**	Single needle lockstitch; Double needle lockstitch; Overlock; Flatlock; Chain stitch; Buttonhole machine; Button sewing machine; Bartack sewing machine; Zigzag sewing machine; Blind stitch machine; Feed-off-arm machine; Cover stitch machine; Elastic inserting machine; Auto pocket setter; Auto belt loop setter; Seam sealing machine; Placket attaching machine; Other sewing machines
Embroidery	**8**	Single-head embroidery machine; Multi-head embroidery machine; Computerized embroidery machine; Sequin embroidery machine; Chenille embroidery machine; Cap embroidery machine; Laser embroidery machine; Other embroidery machines
Finishing	**9**	Iron; Steam iron; Heat sealing machine; Fusing machine; Thread trimmer; Needle detector; Embroidery back trimmer; Label cutter; Other finishing machines
Printing	**7**	Screen printing machine; Roller printing machine; Digital printing machine; Sublimation printing machine; Heat transfer printing machine; Pad printing machine; Other printing machines
Washing & Dyeing	**8**	Industrial washing machine; Hydro washing machine; Drying machine; Dyeing machine; Stone washing machine; Enzyme washing machine; Ozone washing machine; Other washing and dyeing machines
Packing & Labeling	**6**	Packing machine; Label printing machine; Barcode printing machine; Shrink wrapping machine; Tagging machine; Other packing and labeling machines
Specialized Operations	**7**	Pleating machine; Snap button machine; Laser marking machine; Velcro attaching machine; Belt loop cutter; Riveting machine; Other specialized machines
Inspection & Fabric Preparation (Effective Section)	**5**	Fabric spreading machine; Pattern plotting machine; Fabric inspection machine; Roller heat machine; Other fabric preparation/inspection machines
Total	**78**	**78 machine types across 9 production sections**

Source: Author's Compilation

5. Findings

5.1 Finding I

Objective 1: Structural Drivers of Carbon Lock-in

Examine why the RMG sector remains locked into carbon-intensive production

Capital and Energy Are Complements, Not Substitutes

- A translog production function is estimated to characterise substitution among capital, labour, and energy
- The capital–energy cross-term is positive and statistically significant ($p<0.01$) — capital and energy behave as complements
- This is the empirical signature of technological lock-in: expanding the machine stock under current technology raises energy consumption rather than allowing it to be economised away
- If capital and energy were substitutes, factories could cut energy intensity through capital reallocation without sacrificing output — the evidence rejects this
- Implication: capital deepening within the existing technology paradigm cannot by itself deliver decarbonization

5.1 Finding I

Objective 1: Structural Drivers of Carbon Lock-in

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Capital and Energy Are Complements, Not Substitutes

Table 3: Trans-log Production Function Results

	(1) Full Translog	(2) Cobb-Douglas
lnK	0.2814	0.0342
	(0.3899)	(0.0569)
lnL	0.7328	0.7699***
	(0.8493)	(0.0839)
lnE	-0.4395	0.0813
	(0.4914)	(0.0729)
lnK2	-0.0973**	
	(0.0476)	
lnL2	0.0507	
	(0.1421)	
lnE2	-0.1152**	
	(0.0556)	
lnKL	-0.0614	
	(0.1179)	
lnKE	0.3294***	
	(0.1199)	
lnLE	-0.0705	
	(0.1483)	
_cons	7.5711***	7.1729***
	(1.3403)	(0.2264)
N	347	347

Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.10.

Source: Author's Calculation

5.1 Finding I

Objective 1: Structural Drivers of Carbon Lock-in
Examine why the RMG sector remains locked into carbon-intensive production

A Structural Core of Irreplaceable Machines

- Machines are classified as irreplaceable when they show near-universal prevalence, scale-invariant deployment, and a strictly positive minimum count even in the smallest factories
- The sewing category holds the great majority of irreplaceable machine types: single needle lockstitch (highest score), overlock, flatlock, bar tack, buttonhole, button sewing, and double needle lockstitch
- Two cutting machines i.e the drill marker and notching machine, are irreplaceable by technical necessity despite very low prevalence
- Because these machines cannot be substituted away, they represent the technological core of the sector's carbon lock-in
- Implication: substitution alone cannot decarbonize sewing, the category with the largest irreplaceable core and the largest installed share

5.2 Finding II

Objective 2: Energy Intensity, Efficiency Heterogeneity, and Saving Potential

Quantify factory-level energy intensity, machine-type efficiency differences, and sector-wide energy-saving potential

Sewing Dominates the Machine Stock

- Sewing is the core value-adding stage of garment production. Because small categories cannot generate sector-level savings regardless of intensity, any structural intervention on energy must operate primarily through the sewing stage.

Table 4: Category-level share of installed machine capacity across 350 factories

Category	Share of Machine Stock (%)
Sewing	85.2
Cutting	5.6
Finishing	5.2
Washing & Dyeing	2.0
Specialised / Support	1.0
Embroidery	0.2
Packing & Labelling	0.6
Printing	0.1

Source: Author's Calculation

5.2 Finding II

Objective 2: Energy Intensity, Efficiency Heterogeneity, and Saving Potential
Quantify factory-level energy intensity, machine-type efficiency differences, and sector-wide energy-saving potential

Washing & Dyeing Is the Most Energy-Intensive Stage

- Category-level energy intensity (energy per unit output) reveals a very different ranking from installed capacity
- Washing & dyeing records the highest intensity, roughly double the next-highest category, specialised support
- Sewing, despite dominating installed capacity, shows only moderate intensity
- Packing & labelling is the least energy-intensive stage
- Implication: sector energy consumption is shaped jointly by scale and by intensity, a strategy focused only on the largest category by capacity would miss a stage that is small but disproportionately energy-intensive

5.2 Finding II

Objective 2: Energy Intensity, Efficiency Heterogeneity, and Saving Potential

Quantify factory-level energy intensity, machine-type efficiency differences, and sector-wide energy-saving potential

Smaller Factories Face the Largest Efficiency Gaps

- Percentage gap falls sharply with size (57% → 9%), consistent with smaller factories running older machine vintages under tighter financing constraints. But absolute saving potential rises with size — large factories offer the greatest tonnage of savings even from a smaller percentage gap.

Table 5: Frontier energy-saving potential by factory size quintile (gap vs. 10th-percentile frontier)

Size Quintile	% Energy Saving Gap	Absolute Saving Potential
Q1 (Smallest) (worker number L = 111)	57.3%	Lowest
Q2 (L = 231)	46.1%	Low
Q3(L= 486)	41.0%	Moderate
Q4 (L =960)	26.7%	High
Q5 (Largest) (L = 2105)	8.9%	Highest

Source: Author's Calculation

5.2 Finding II

Objective 2: Energy Intensity, Efficiency Heterogeneity, and Saving Potential

Quantify factory-level energy intensity, machine-type efficiency differences, and sector-wide energy-saving potential

Enormous Efficiency Variation Within Machine Categories

- The energy-to-output ratio (ρ) varies by orders of magnitude even among machines performing closely related functions
- In cutting: the band knife cutter is roughly 300x more energy-intensive per unit of output than the laser cutting machine
- In sewing: the buttonhole machine is roughly 140x more intensive than the most efficient sewing machine types
- This heterogeneity is the empirical basis for identifying which machine substitutions can actually deliver energy savings
- Rankings should be read with care — machines with sparse sample representation show systematically higher ratios, likely reflecting limited identifying data as well as genuine inefficiency

5.2 Finding II

Objective 2: Energy Intensity, Efficiency Heterogeneity, and Saving Potential

Quantify factory-level energy intensity, machine-type efficiency differences, and sector-wide energy-saving potential

Sector-Wide Energy-Saving Potential from Substitution

- Mean factory saving rate: 10.17%. The gap between model-consistent and capacity-adjusted savings reflects that many factories already operate below rated capacity — the two figures should not be conflated when reporting sector potential

Table 6: Linear-programme results: energy-minimising machine reallocation across 350 factories

Indicator	Monthly	Annual
Model energy consumption (observed mix)	128,430.9 MWh	1,541,170.8 MWh
Optimal energy consumption	107,060.4 MWh	1,284,724.8 MWh
Model-consistent saving	21,370.5 MWh	256,445.5 MWh
Expected real saving (capacity-adjusted)	2,110.9 MWh	25,330.2 MWh

Source: Author's Calculation

5.2 Finding II

Objective 2: Energy Intensity, Efficiency Heterogeneity, and Saving Potential
Quantify factory-level energy intensity, machine-type efficiency differences, and sector-wide energy-saving potential

Savings Concentrate in Cutting, Not Sewing

- Cutting delivers a disproportionate share of savings despite its small footprint, because it contains highly substitutable machine pairs. Sewing offers limited substitution-based savings because it is dominated by irreplaceable machines — reinforcing the case for complementary strategies beyond substitution.

Table 7: Category-level share of installed machine stock vs. share of total energy saving

Category	Share of Machine Stock	Share of Total Saving
Cutting	~5.5%	27.3%
Sewing	~85%	2.9%
Packing	<1%	0.4%
Printing	<1%	0.01%
Embroidery	<1%	~0%

Source: Author's Calculation

Objective 2: Energy Intensity, Efficiency Heterogeneity, and Saving Potential
Quantify factory-level energy intensity, machine-type efficiency differences, and sector-wide energy-saving potential

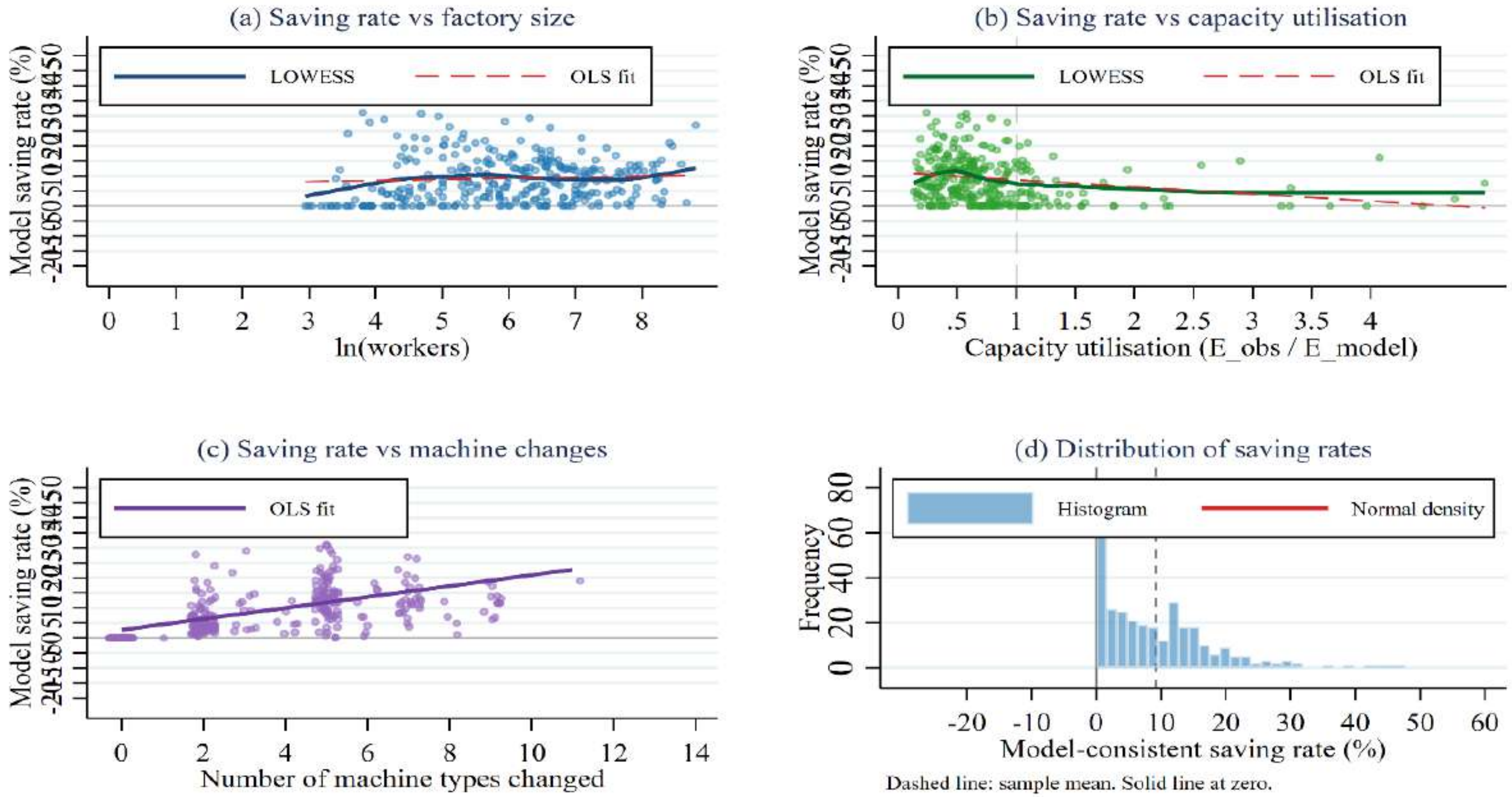
What Predicts Whether a Factory Realises Savings

- A regression of the model-consistent saving rate on factory characteristics identifies the number of substitutable machine types changed by the optimisation as the strongest and most consistent predictor (significant at 1% across all specifications)
- Factory scale (output) and capacity utilisation show no robust independent association with the saving rate once this is controlled for
- Larger workforce is associated with a smaller proportional saving rate in mean-based estimates, though this is not robust across the full distribution of factories
- Policy implication: the decisive lever is whether a factory's specific machine stock contains empirically validated substitution opportunities — not factory size or utilisation in general

5.2 Finding II

Objective 2: Energy Intensity, Efficiency Heterogeneity, and Saving Potential
Quantify factory-level energy intensity, machine-type efficiency differences, and sector-wide energy-saving potential

What Predicts Whether a Factory Realizes Savings



Sample: optimal-status factories with E_obs > 0 (1st–99th percentile saving rates shown).
Source: LP optimisation results, 350-factory RMG survey.

5.3 Finding III

Objective 3: Financial and Institutional Conditions for Renewable Adoption
Evaluate the financial and institutional conditions shaping renewable energy adoption

Renewable Energy Adoption Remains Limited and Uneven

- Rooftop solar PV under Bangladesh's net metering regime is established in the literature as financially viable, strengthened further where concessional financing is available
- Adoption is expected to be uneven across factory size, larger factories have greater roof area and financing capacity
- Critical structural limit: rooftop solar can offset grid and captive electricity consumption, but cannot substitute for the gas-fired boilers used in thermal finishing and washing processes
- The residual thermal energy requirement in washing & dyeing, the most energy-intensive category, remains outside the reach of renewable electrification under current technology

5.3 Finding III

Objective 3: Financial and Institutional Conditions for Renewable Adoption
Evaluate the financial and institutional conditions shaping renewable energy adoption

Behavioural and Organisational Barriers Persist

- Qualitative evidence (KIIs) explains why observed adoption lags the technical and financial potential identified in the quantitative analysis
- Three explanations from the energy-efficiency-gap literature are assessed against Bangladesh RMG evidence:
    - High upfront capital requirements relative to firm liquidity
    - Information constraints on the true performance and payback of alternatives
    - Organisational/behavioural factors, short investment horizons, risk aversion
- International buyers already exert informal demand-side pressure for emissions reduction — a channel distinct from direct financial return
- Model-factory case studies show these barriers are not insurmountable where blended finance and demonstrated practice are present

5.4 Finding IV

Objective 4: Renewable Pathways for Cost Predictability and Reduced LNG Exposure

Assess how renewable energy pathways can improve cost predictability and reduce exposure to LNG price volatility

Solar Offset Delivers Meaningful Cost Savings

- That the sample-grounded ceiling (10%) is far below the illustrative policy benchmark (30%) shows the binding constraint on savings today is the low level of adoption itself, not the underlying economics of solar substitution.

Table 8: Calibrated monthly energy cost under illustrative renewable offset scenarios (baseline: 998,190 BDT)

Scenario	Mean Monthly Cost (BDT)	Mean Saving	Range Across Factories
Baseline (reported expenditure)	998,190	—	—
30% solar offset (illustrative)	846,435	15.7%	4.4% – 23.7%
10% offset (sample-observed max)	944,655	5.5%	1.5% – 14.7%

Source: Author's Calculation

5.4 Finding IV

Objective 4: Renewable Pathways for Cost Predictability and Reduced LNG Exposure
Assess how renewable energy pathways can improve cost predictability and reduce exposure to LNG price volatility

Renewables Also Hedge Against Price Volatility

- A Monte Carlo simulation (1,000 draws per factory) models grid and gas price uncertainty, reflecting the greater volatility of internationally linked LNG pricing
- Mean coefficient of variation of monthly cost falls from 0.1148 (baseline) to 0.1102 under the renewable offset scenario — a ~4% reduction, positive for 96% of factories
- Volatility reduction is present across every size quintile; expected saving under uncertainty is broadly similar across quintiles (5.3%–5.7%)
- The expected cost saving under simulated price uncertainty (5.46%) closely matches the deterministic scenario (5.51%) — the benefit is not an artefact of holding prices fixed
- Natural gas for thermal processes remains outside the reach of this hedge, and outside the reach of rooftop solar generally

5.5 Finding V

Objective 6: Cost of Implementing the LP-Recommended Substitution
Estimate the capital cost required to implement the linear programme's energy-minimising machine reallocation

Implementing the LP's Reallocation Costs BDT 66–132 Billion

- Machine costs were estimated from each factory's size-quintile average replacement cost, resolving all but 18 of 1,238 machine-change records (98.5% costed), with only the cap embroidery machine entirely unmatched

Table 9: Sector-level implementation cost of the LP-recommended substitution

Metric	50% Adoption	Full Adoption
Sector total implementation cost (BDT)	6,604 crore	13,209 crore
Total machine units acquired	7,501	15,002
Machine-change records costed	1,220 / 1,238 (98.5%)	1,220 / 1,238 (98.5%)
Median cost-effectiveness (BDT per MWh/month saved)	1.31 crore	2.62 crore

Source: Author's Calculation

5.5 Finding V

Objective 6: Cost of Implementing the LP-Recommended Substitution
Estimate the capital cost required to implement the linear programme's energy-minimising machine reallocation

Cost Concentrates in the Largest Factories

- Mean cost rises roughly 180-fold from Q1 to Q5, even though factory counts are similar across quintiles (42 to 64). Weighted by factory count, Q5 alone — 24.8% of factories — accounts for 70.9% of sector-wide cost, versus 0.3% for Q1

Table 10: Mean implementation cost by factory size quintile, size-quintile basis

Size Quintile	Mean Cost, 50% Adoption (BDT)	Share of Sector Cost
Q1 (Smallest) (worker number L = 111)	0.40 crore	0.3%
Q2 (L = 231)	4.03 crore	3.2%
Q3(L= 486)	10.5 crore	7.8%
Q4 (L =960)	23.2 crore	17.9%
Q5 (Largest) (L = 2105)	73.1 crore	70.9%

Source: Author's Calculation

6. Constraints & Opportunities

6. Constraints & Opportunities

Objective 5: An Integrated Strategy for Structural Emissions Reduction
Develop an integrated technological, financial, and institutional strategy for structural emissions reduction

Structural Constraints to Decarbonization

- **Technological**

  Complementary capital–energy structure and an irreplaceable machine core limit substitution-based savings, especially in sewing; thermal processes set a floor on fossil dependence

- **Financial**

  Liquidity constraints, unequal access to green finance, short investment horizons — falling hardest on smaller, older-vintage factories

- **Institutional**

  Regulation emphasises procedural compliance over measurable outcomes; fragmented governance raises transaction costs for renewable project approval

- **Behavioural**

  Weak energy management, limited technical expertise, and risk-averse capital allocation slow adoption even where it is financially justified

6. Constraints & Opportunities

Objective 5: An Integrated Strategy for Structural Emissions Reduction
Develop an integrated technological, financial, and institutional strategy for structural emissions reduction

Opportunities and Strategic Pathways

- **Energy system**

  Redirect machinery replacement toward validated substitution sets (esp. washing & dyeing, printing); scale rooftop solar among larger factories with greater roof area and financing capacity
- **Financial**

  Expand blended finance — private investment, concessional lending, government-backed credit — targeted at smaller, capital-constrained factories
- **Institutional**

  Shift regulation from procedural to outcome-based compliance via mandatory energy auditing and standardised emissions reporting; streamline approval procedures
- **Behavioural**

  Leverage international buyer demand and formalise preferential sourcing for verified decarbonization progress; disseminate model-factory case studies

7. Recommendations

7. Recommendations

- **Upgrade Core Production with Efficient Machinery:** Direct substitution incentives ought to be provided toward categories the evidence justifies , cutting delivers 27% of savings from 5.5% of machine stock; sewing delivers under 3% from 85%
- **Need for Overall Renewable Electrification:** Policy needs to be shifted toward renewable electrification and long-term R&D on lower-energy sewing technology
- **Addressing Thermal Process Intensity:** Policy attention needs to be extended to thermal processes in washing & dyeing, which cannot be addressed by machine substitution or renewable electricity alone
- **Financial Instruments:** Blended finance should be targeted at the smaller-factory segment, where the efficiency gap is largest and financing constraints bind hardest
- **Targeted Regulation**: Regulation needs to be moved toward measurable outcomes, coordinate institutions to lower transaction costs, and formalise buyer-driven demand incentives
- **Reducing the Technical Burden on Firms Seeking Finance:** Financial institutions should be encouraged to develop standardised appraisal frameworks for renewable energy and efficiency investment that reduce the technical expertise burden currently placed on individual firms during the loan application process.

8. Conclusion

- **Energy use is structurally locked in:** Capital and energy are complements, and an irreplaceable machine core limits how far substitution alone can cut consumption
- **Savings are concentrated, not diffuse:** Cutting and finishing categories deliver disproportionate gains from a small share of machine stock, while sewing offers little
- **Renewables help, but only partly:** Solar offsets reduce cost and price volatility, yet thermal processes in washing and dyeing remain beyond their reach
- **The transition is affordable but uneven:** Implementing the recommended reallocation costs BDT 6,604 -13209 crore, with cost and capacity concentrated in the largest factories
- **Coordinated action is the binding requirement**: Technological, financial, institutional, and behavioural constraints reinforce one another, so partial intervention will not break carbon lock-in
- ***Decarbonizing Bangladesh's RMG sector is therefore not a single technology choice but a sequenced, financed, and regulated programme — one that doubles as a competitiveness strategy in a buyer market that increasingly prices verified emissions performance.***

Thank you