Redirecting Nordic Investment: From LNG to Renewables in Bangladesh

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Study Background: The Great Energy Shift

01 Context: fuel sourcing transition

Bangladesh moving from domestic gas reliance to imported LNG.

03 Current state: power sector crisis

Fuel shortages and large capacity payments require rethinking foreign financing.

02 Problem: economic vulnerabilities

Shift increases balance-of-payments pressure and reliance on foreign financiers.

04 Implication: financing choices matter

International financiers influence long-term system reliability and investment commitments.

Study Framework

WHY THIS STUDY?

Rationale

- **The Nordic Paradox:** Climate champions abroad, yet funding fossil lock-in here.
- **The Financial Trap:** Exposing the risks of relying on volatile global LNG markets.

WHAT WE AIM FOR

Objectives

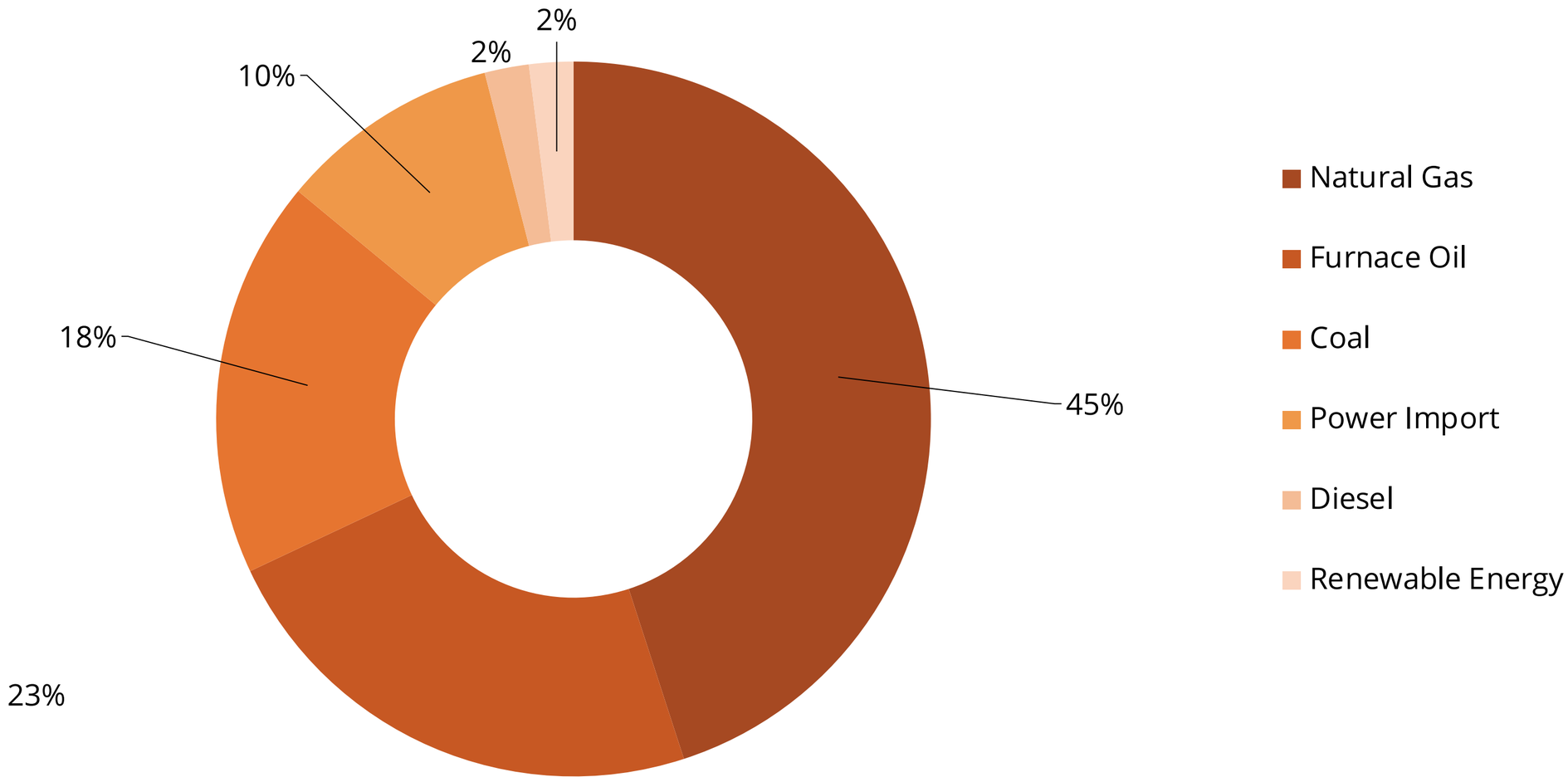
- Map financial flows of energy-finance ecosystem to BD.
- Assess economic, social and environmental costs and risks.
- Design a Just Energy Transition Roadmap.

HOW WE DID IT

Methodology

- **Case Story:** Community Survey in Khulna and Moheshkhali
- **Policy Review:** IEPMP & Renewable Energy Policies.
- **Validation:** Expert interviews & workshops.

Energy Mix in Bangladesh Share (%)



Bangladesh at a Crossroads: The High Cost of Energy Security

Macroeconomic stress from LNG imports and idle-plant capacity payments

$17.6

Forex drain: LNG imports (2018–2025)

US$17.6 billion spent on LNG imports over 2018–2025

1.05T

Capacity charges paid for idle plants (since 2009)

Tk 1.05 trillion paid in capacity charges for idle plants since 2009

Crowding out of development spending

High energy payments reduce funds for social and infrastructure programs

Fiscal exposure from fixed capacity payments

Long-term obligations persist despite idle capacity

Planning paradox: overcapacity and fuel shortages

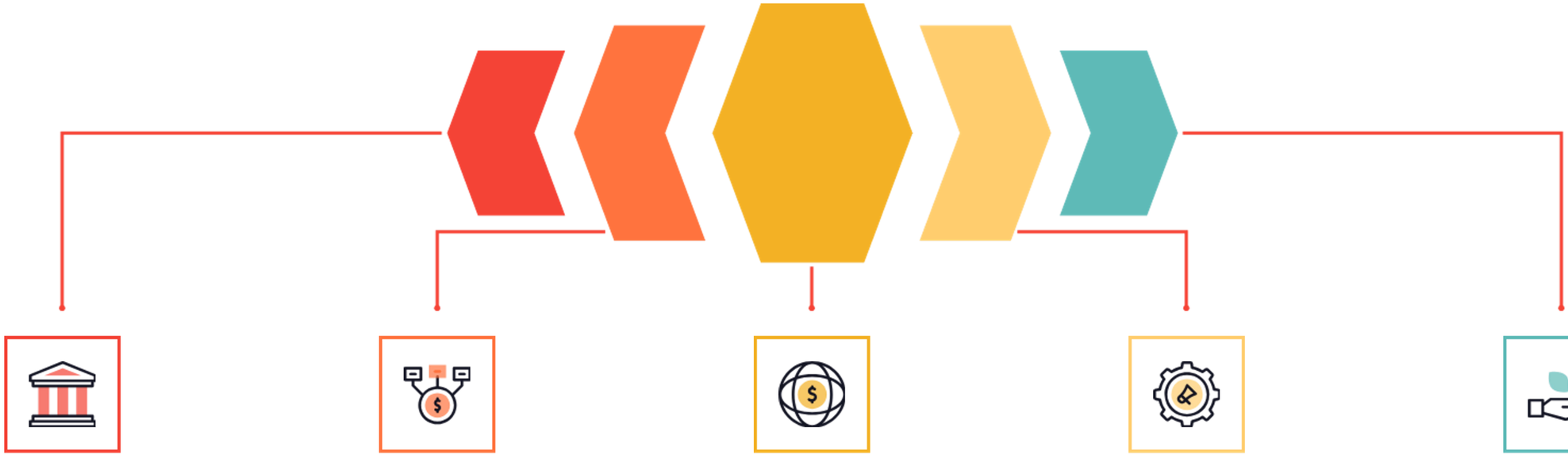
Misaligned capacity decisions amid unreliable fuel supply

Implication: constrained fiscal flexibility

Limited ability to respond to shocks or invest in priorities

The Core Findings: The Nordic Paradox

Climate leaders financing fossil fuel lock-in in partner countries



Nordic Governments

Policy leadership on decarbonization and climate ambition.

Sovereign Wealth Funds (e.g., NBIM)

Equity holdings that include banks and companies supporting LNG expansion.

Global Oil Majors and Banks

Providers of capital and projects that drive LNG buildout and contracts.

Bangladesh LNG Projects

Recipient of finance and technology, e.g., LNG capacity and Wärtsilä engines legacy support.

Policy Coherence & Stewardship Concerns

Mismatch raises questions on investor stewardship and development outcomes.

The Economic Burden: Rupsha as a Stranded Asset

US$1.15B invested - plant non-operational

Investment: US$1.15 Billion
Capital fully deployed; no generation

Capacity: 800 MW
Commissioned mid-2024 but not producing

Status: Non-operational
Plant idle due to gas shortages

Cause: Fuel supply mismatch
LNG-dependent supply shortfalls prevent operation

Implications: Stranded-asset and fiscal risk
Exposure for host government and investors

01 

Analytical takeaway: fuel mismatch and contractual commitments create stranded-asset risk

Rupsha exemplifies systemic vulnerability

02 

Summary: Reassess LNG strategy and contract design

Use case for addressing operational and fiscal fragility

The Economic Cost of Inaction: Opportunity Cost

US$11 billion spent on spot LNG could fund 6.5 GW of solar

Spot LNG (2022–2024)

1. Total spend: US$11 billion
2. Price volatility: US$10 to US$80 per MMBtu
3. Exposure: large fiscal and economic shock risk
4. Cost type: recurring fuel import expense

Solar alternative

1. Equivalent capital could fund 6.5 GW solar capacity
2. Benefit: one-time capital investment with long-term generation
3. Impacts: lower recurring fuel costs and improved energy security
4. Fiscal benefit: shifts spending from imports to domestic assets

The Social Cost of Moheshkhali: Displacement and Loss

Thousands displaced; US$540 million estimated loss

Widespread displacement

Thousands of families relocated for the energy complex

Livelihoods destroyed

Ancestral salt farming and shrimp cultivation disrupted; Arable land contaminated

Major economic loss

US$540 million estimated loss of local fishing economy from displaced fishing fleets over 10 years

Risk to social cohesion

Large infrastructure projects can fragment communities

Recommended social protections

Compensation, livelihood restoration, and participatory planning

Compensation programs

Fair, timely payments tied to verified losses

Livelihood restoration

Support for salt, shrimp, and fishing alternatives

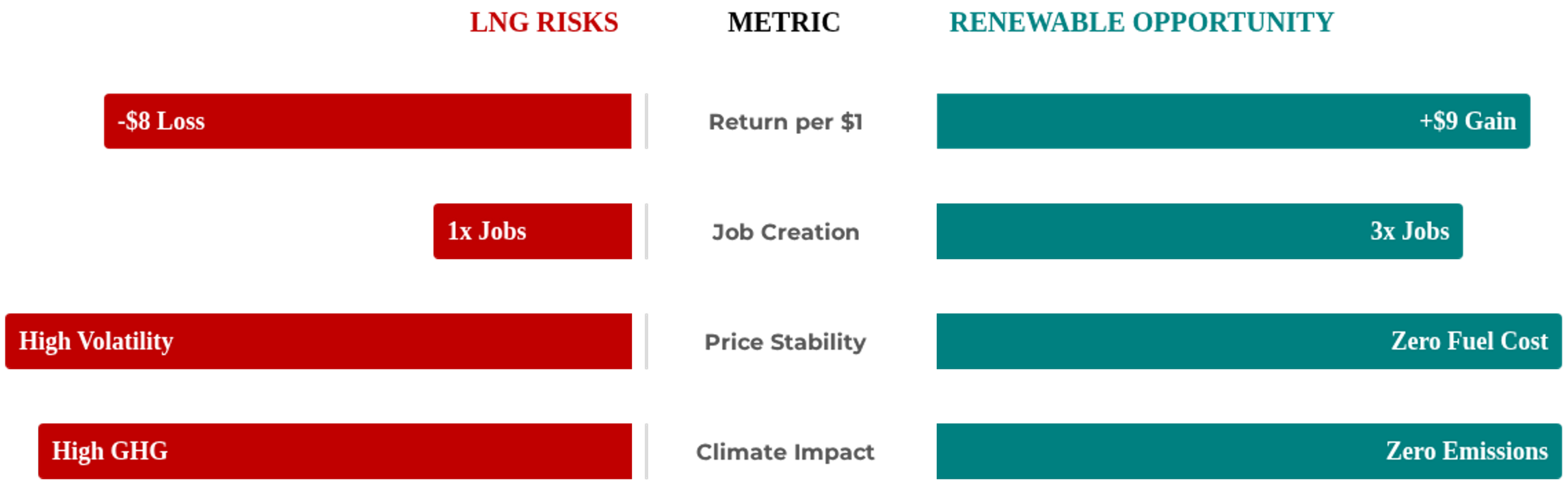
Participatory planning

Inclusive decision making with affected communities

Monitoring and grievance redress

Transparent tracking and accessible complaint mechanisms

The Economic Reality: Untapped Opportunity



Data compares lifecycle economic return and impact of LNG vs. Renewable Energy investments in Bangladesh.

$1 investment on RE saves $17 economic loss incurred by LNG wash

Lessons Learned: A Financial Crossroads

LNG is a Financial Trap

Every dollar invested in LNG burns forex, increases debt, and locks Bangladesh into volatile markets.

Renewables are Wealth Creation

Redirecting capital to solar and wind stops the bleeding, creating permanent assets and energy sovereignty.

Nordic Finance holds the Key

The "Nordic Paradox" must end. It is time to align investment portfolios with global climate commitments.

Ensuring a Just Transition: Equity and Inclusion

Practical measures to protect livelihoods, access, and ownership

01 **Reskilling for energy workers**

- Train gas technicians for solar and wind installation jobs
- Targeted skills programs aligned with local market demand
- Certification pathways and placement support

02 **Gender targets**

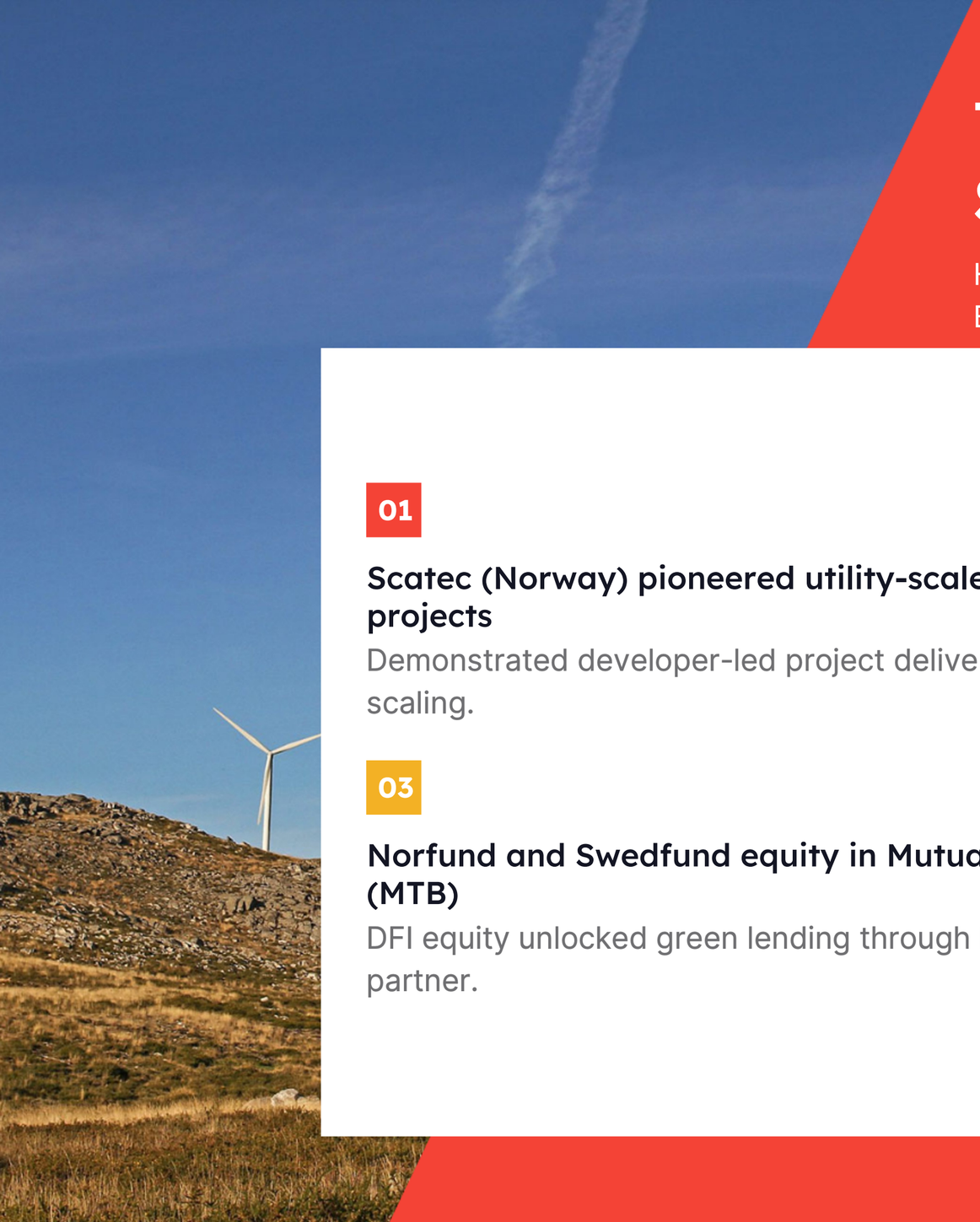
- Set 30% female participation in new renewable projects
- Recruitment and retention measures for women
- Gender-responsive training and facilities

03 **Community stewardship**

- Develop community-owned models like coastal solar desalination
- Revenue sharing and local governance structures
- Long-term operational stewardship plans

04 **Program components and safeguards**

- Stakeholder mapping to identify vulnerable groups
- Social protection measures for transitional losses
- Monitoring indicators to track inclusion and livelihoods



The Pivot Has Begun: Nordic Success Stories

How Norway, Sweden and Nordic finance unlocked green projects in Bangladesh

01

Scatec (Norway) pioneered utility-scale solar projects

Demonstrated developer-led project delivery and local scaling.

02

H&M Group (Sweden) backing first 500 MW offshore wind venture

Corporate offtaker commitment de-risks large-scale offshore finance.

03

Norfund and Swedfund equity in Mutual Trust Bank (MTB)

DFI equity unlocked green lending through local banking partner.

04

How to replicate: partnerships plus tailored risk mitigation

Combine commercial developers, corporate offtakers and DFIs with local capacity building.

Financial Roadmap: Instruments to Unlock Capital

How first-loss equity, guarantees, green bonds, and a trust fund mobilize private capital

First-loss Equity (20-30%)

Nordic DFIs provide 20-30% first-loss equity to absorb initial losses and catalyze private investment.

Nordic-Bangladesh Just Transition Trust Fund

Blended finance vehicle combining instruments to prioritize projects with social safeguards and mobilize private capital.

Green Export Credits

Guarantees for importing Nordic green technology such as wind turbines to lower commercial risk.

Sovereign Green Bonds

Use World Bank and MIGA guarantees to lift credit ratings and reduce borrowing costs for government bonds.

Call to Action for Nordic Stakeholders

Targeted steps to reduce LNG exposure and scale Bangladesh renewables

Portfolio review: NBIM to assess LNG exposure in Bangladesh
Identify holdings, quantify exposure, publish transparent findings

Commit capital: collective US$200 million equity for Bangladesh renewables
Target DFIs and pension funds; link commitments to local partnerships

MDB diplomacy: use voting power to stop gas guarantees
Coordinate Nordic votes, push export-credit and guarantee reform

Implementation checklist: portfolio review then commit capital then MDB diplomacy
Sequence actions, set milestones, publish progress reports quarterly

"Aligning Nordic capital with Bangladesh’s renewable energy vision is not just wealth transfer - it is aligning value with action."

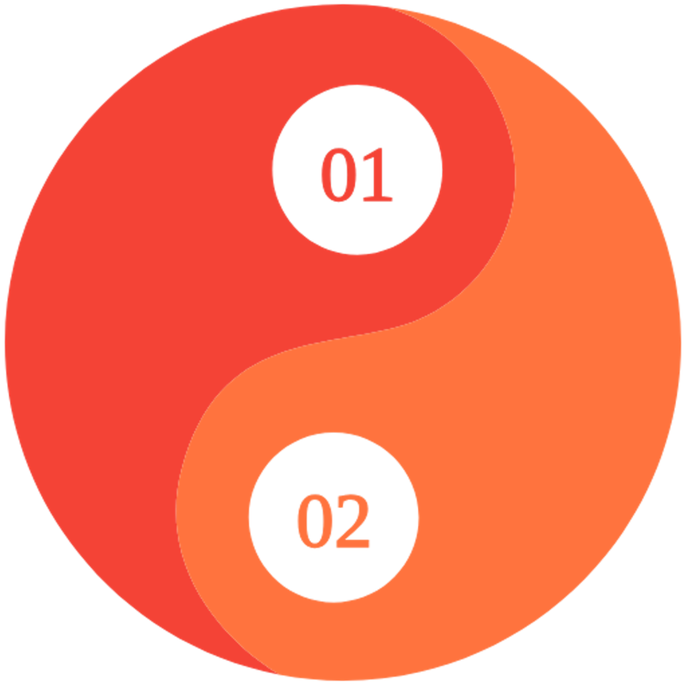
Thank You

Rationale of the Study

Contrast between Nordic climate leadership and investment outcomes

Nordic Aid and Climate Leadership

- Global reputation as climate champions
- Aid prioritizes development and climate goals
- Influences policy, diplomacy, and investor



Nordic Investment Outcomes

- Sovereign Wealth Funds finance projects in the Global South
- Investments often support fossil fuel lock-ins
- Creates vulnerability for countries like Bangladesh facing a financial trap

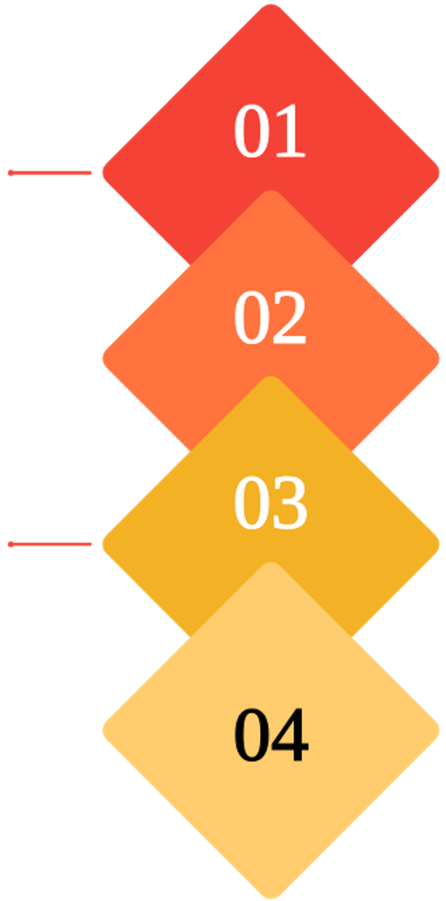
Objectives of the Study

Map key stakeholders

Identifying the stakeholders involved in the energy-finance ecosystem in Bangladesh.

Evaluate the Social and Environmental Impact

Calculate the social cost of internal displacement and loss of local economy, and the impact on the environment



Assess stranded-asset risk

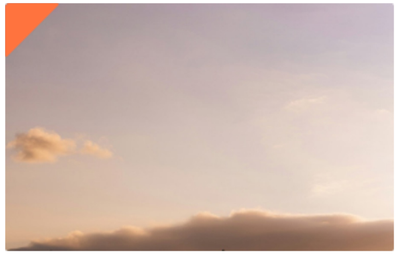
Quantify risk of stranded assets with focus on the Rupsha power plant and exposure across investors.

Develop financing roadmap

Propose practical financial instruments for a Just Energy Transition directed at policy and investor action.

Research Questions

RQ1: Who are key stakeholders across Bangladeshi and Nordic energy-finance ecosystem?



RQ2: What are the financial, policy and environmental risks associated with LNG expansion in Bangladesh and what should be the derisking mechanism?

RQ3: What are the investment opportunities and instruments for upscaling renewable energy in Bangladesh using Nordic capital?

Methodology: Mixed-Methods Research

01

Data collection

Conducting community survey in Khulna and Moheshkhali Area

02

Desk review

Analyze Bangladesh’s renewable energy policy, governance structure and the political economy of energy sector in Bangladesh

03

Case story

Deep dive on Rupsha 800 MW plant as a stranded assets example; in-depth discussion with fisherman and local community in Moheshkhali, Cox’s Bazar

04

Validation workshops

Key Informant interviews and validation workshop including today's session

05

Synthesis

Combine quantitative tracing with qualitative review and validation