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# Facilitating Green Loans for Sustainable Energy Transition

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The case of distributed solar PV (DSPV)  
and electric vehicle (EV) lending in  
Pakistan

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- Overview of DSPV and EV lending facilities in Pakistan
  - Objective of our study and methodological framework to assess green lending challenges
  - Thematic analysis: Major challenges in the lending space
  - Conclusion and recommendations
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# Overview of DSPV and EV lending facilities

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# Introduction

- Large-scale diffusion of renewable energy technologies will require significant investments.
- Transitions in the developing world must be built on access and affordability.
- For capital-intensive technologies such as solar and wind, the cost of capital is key.
- Green loans are a promising means of achieving a green economy and increased responsiveness from customers for green product adoption.
- Central banks in their capacity as guardians of the financial system have a crucial role to play.
- The State Bank of Pakistan (SBP)—the central bank—has taken great strides in recognizing the importance of greening Pakistan’s financial sector.
- In 2016, SBP introduced a concessionary financing scheme for both large- and small-scale renewable energy solutions.
- In 2023, another concessional financing facility for e-bikes and e-rickshaws was approved.

# State Bank of Pakistan (SBP) financing Scheme for Renewable Energy (RE): Salient features

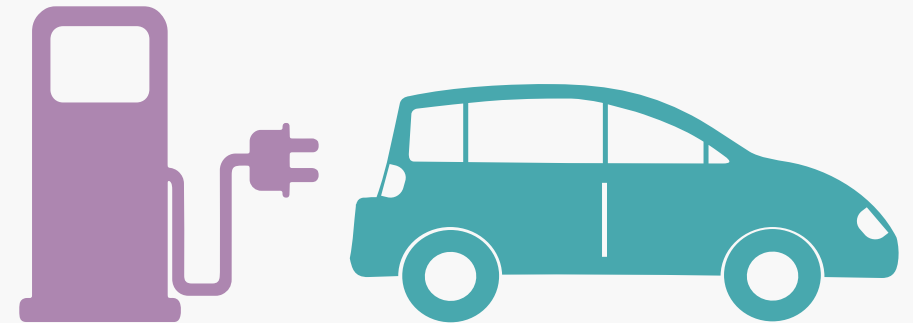
Features	Category I	Category II	Category III
<b>Maximum loan</b>	Rs 6 billion— for a single project	Rs 400 million— for a single borrower	Rs 2 billion— for a single vendor/supplier/company
<b>Tenor</b>	12 years (maximum)	10 years (maximum)	10 years (maximum)
<b>Rate (total 6%)</b>	SBP service charge: 3% Bank spread: 3%	SBP service charge: 2% Bank spread: 4%	SBP service charge: 3% Bank spread: 3%
<b>Down payment</b>	100% of total financing for projects up to 20 MW 50% of total financing for projects between 20—50 MW		100% of total financing
<b>Repayments</b>	<u>Principal:</u> Quarterly/Half yearly  <u>Markup:</u> Quarterly	<u>Principal:</u> Monthly/Quarterly/Half yearly  <u>Markup:</u> Monthly/Quarterly	<u>Principal:</u> Monthly/Quarterly/Half yearly  <u>Markup:</u> Monthly/Quarterly

● This scheme covers power generation renewable energy sources—mainly solar and wind technology

● The scheme is voluntary. Commercial banks decide whether they would like to extend finance/not extend finance under the facility

# Prime Minister's loan Scheme model for e-bikes and e-rickshaws.

- In its 2019 EV policy, the Ministry of Climate Change states its aim of reaching at least 50% of all the two- and three-wheeler sales in Pakistan being electric by 2030.
- To support the scale-up of EVs, the Economic Coordination Committee (ECC) of the Cabinet approved in 2023 the Prime Minister's Youth Business & Agriculture Loan Scheme (PMYB & ALS) model for e-bikes and e-rickshaws.
- Several financing schemes were introduced for e-bikes and e-rickshaws including a cash purchase model, price sharing model, and easy loan model.



# Prime Minister's loan Scheme model for e-bikes and e-rickshaws.

## Financing schemes for two wheelers and three wheelers

### Cash Purchase Model

- (i) Govt will provide PKR 100,000 through banks as processing agents;
- (ii) Consumer lump sum sharing from own sources.

### Price Sharing Model

- (i) PKR 100,000 on sharing basis by government;
- (ii) PKR 70,000 as loan from banks (24 months); and
- (iii) 50% Credit Guarantee by government to the banks.

### Easy Loan Model

- (i) 30% down payment by consumer;
- (ii) 36 months' loan tenure; and
- (iii) 19% interest rate with the government picking up only 50% of the interest rate over a three-year leasing period, 50% Credit Guarantee by government.

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Objective of our study and  
methodological framework to assess  
green lending challenges

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# Objectives

## Objectives



Improve understanding of green lending landscape in Pakistan

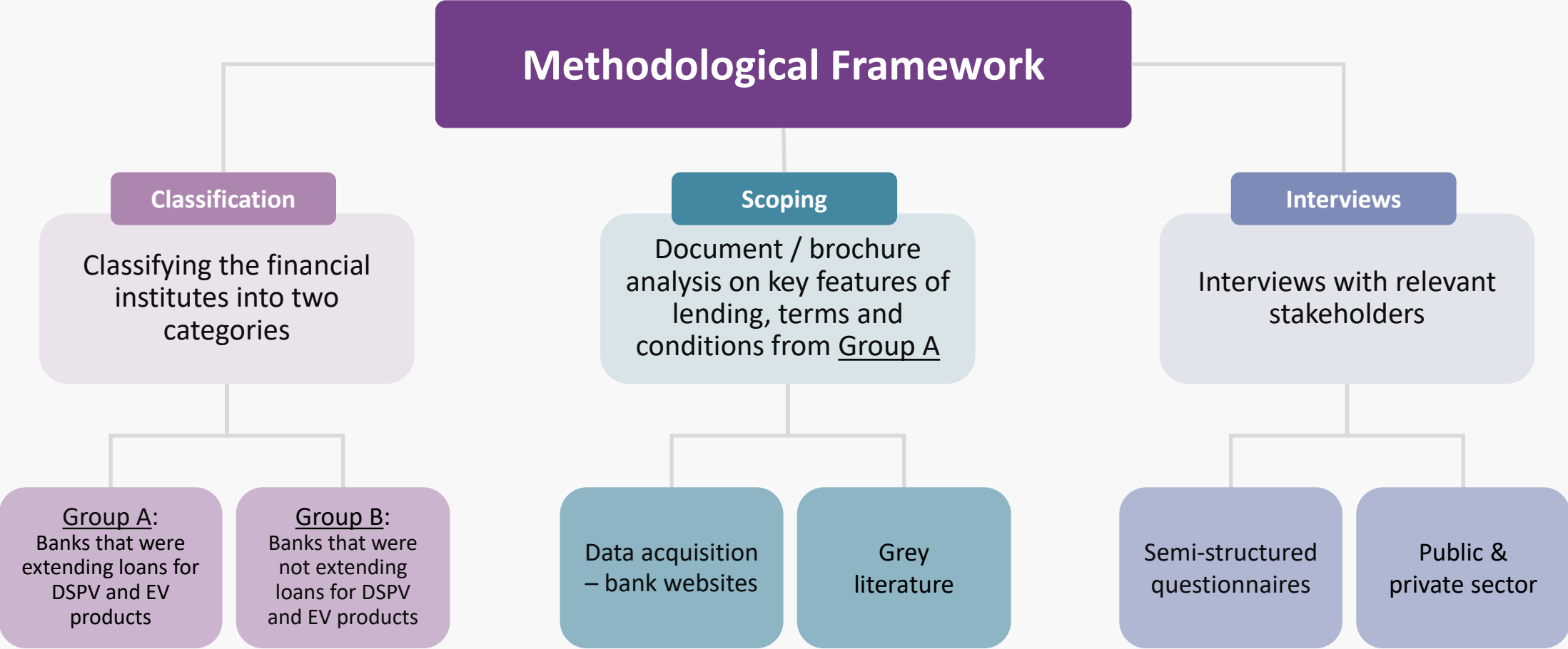


Identify major challenges facing DSPV and EV product lending in Pakistan under the tailored schemes / facilities

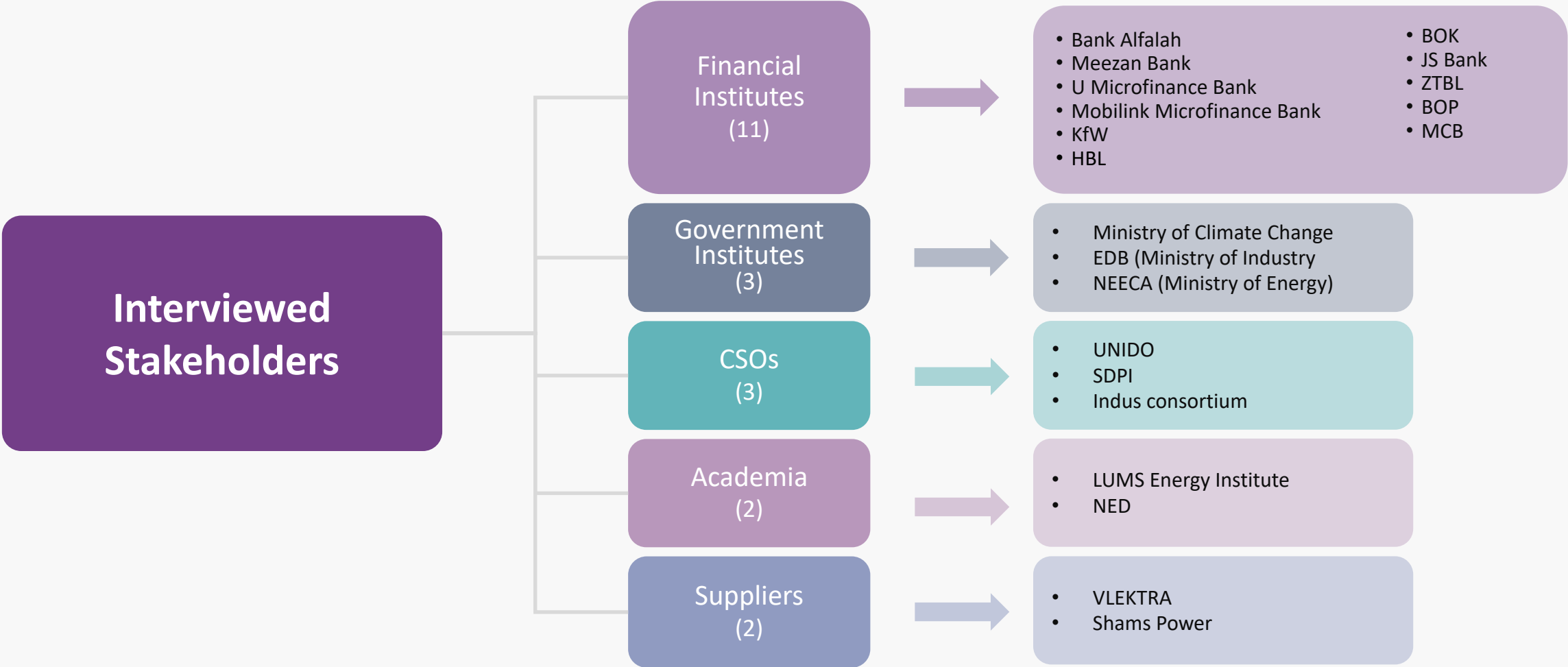


Formulate concrete recommendations on good practices that could overcome barriers and improve access to finance— to steer the capacity of green loans investment in a more ecologically balanced direction

# Methodological Framework



# Interviewed Stakeholders



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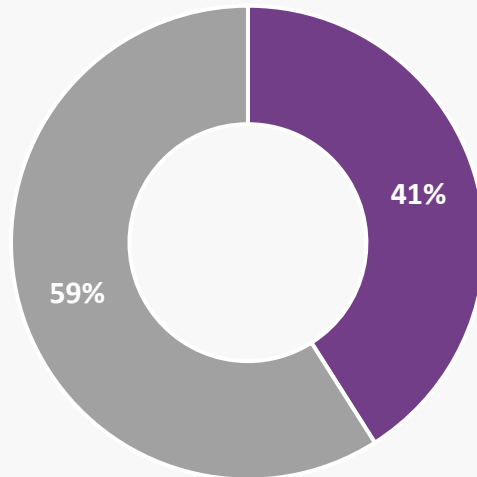
# Thematic analysis – important challenges in the lending space in Pakistan

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# DSPV and EV lending is still in its infancy in Pakistan

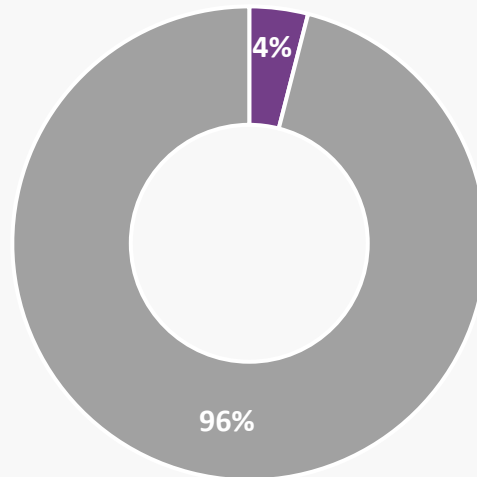
Financial Institutes (FI) engaged in DSPV and EV lending in Pakistan

Financial institutes extending loans for DSPV

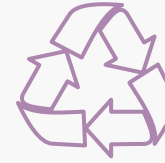


■ DSPV ■ None

Financial institutes extending loans for EVs



■ EVs ■ None



In the quest for sustainability, Pakistan urgently needs to adopt DSPVs and EVs to tackle pressing issues in its key sectors.



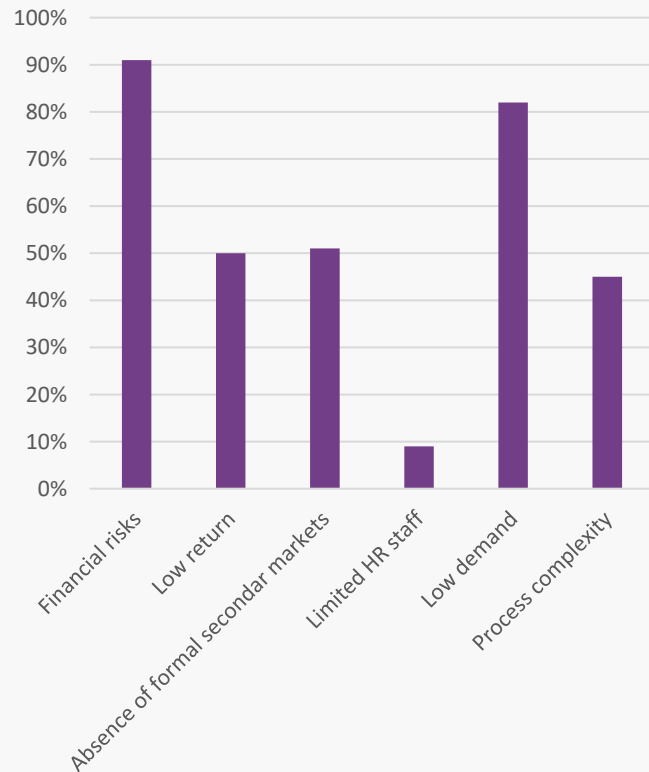
Despite ambitious policies and progressive lending facilities, financial backing is scarce.



Data reveals limited bank involvement in DSPV and EV financing: only 41% for DSPV, and only 4% for EVs.

# Majority banks perceive renewable energy technology as high risk and low return

## Interviews with banks regarding EVs and DSPV lending



**Financial risks:** Concerns related to the likelihood of default or losses associated with financing EVs and DSPVs.

**Low return:** The potential for insufficient profit or benefits from financing these technologies.

**Absence of formal secondary markets:** The absence of formal secondary markets refers to the lack of established platforms or systems facilitating the buying and selling of used electric vehicles or solar systems. This limits ability to offload or trade these assets, affecting the liquidity of banks by reducing the collateral value of these loans.

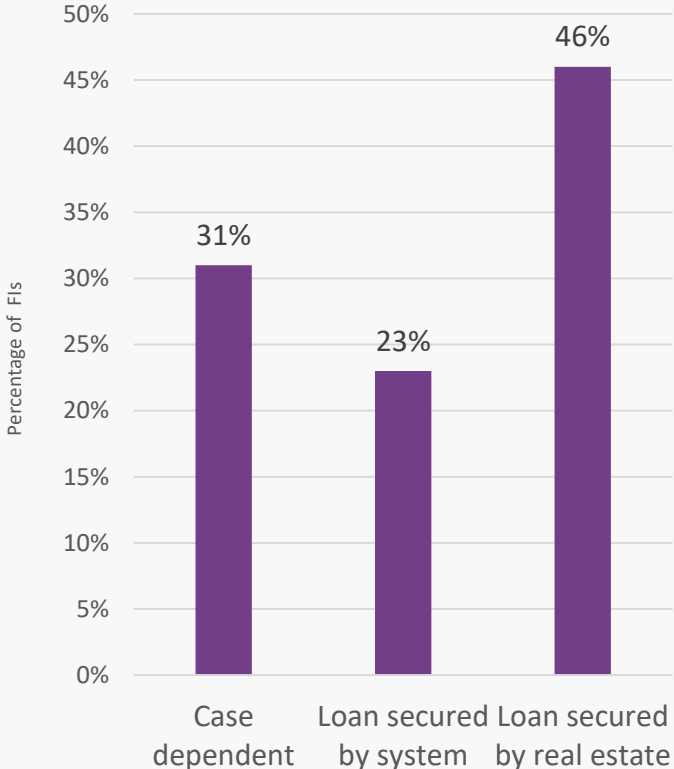
**Limited Human Resource (HR) staff:** Banks often prioritize allocating their human resources to products with high demand.

**Low demand:** Low market demand for a certain product further decreases interest of banks to offer financing

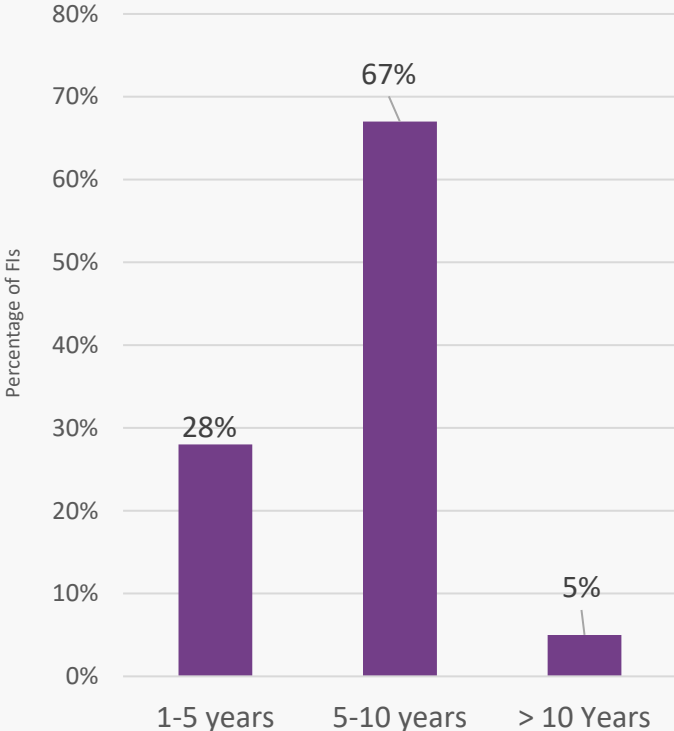
**Process complexity:** The degree of difficulty and transaction cost involved in the financing process.

# Perceived concerns of default risk further transcends into securitisation of loans

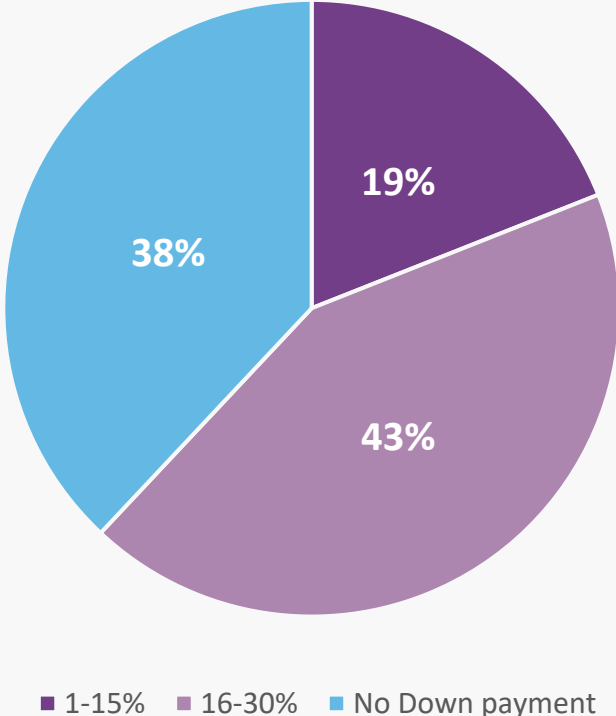
## Collateral requirements



## Loan tenor



## Down payment



# Critical limitations within regulations have been another key constraint

- The SBP introduced the RE scheme with good intentions to support renewable energy uptake. However, majority banks distanced themselves from this lending facility owing to the voluntary regulations.
- The SBP RE Scheme is also on hold now. The central bank has now ceased allocations to banks under the facility.
- Due to the limited scope of the SBP Scheme, a separate facility was introduced to cater to EV financing needs. However, the subsidized loan scheme model for e-bikes and e-rickshaws, which was approved in April last year, has not yet been implemented.



# In a nutshell, green lending options are available, but implementation and access issues persist

## Critical limitations within green lending regulations hinder broader renewable financing initiatives



SBP RE scheme: the central bank has taken an important initiative by rolling out a concessionary facility for power generation renewable energy sources. But problems persist such as: voluntary regulations; flexibility in redesigning salient features/terms of loan; taxonomy issues; lack of monitoring/accountability mechanisms; cessation of new allocation.



Subsidised financing facility for e-bikes and e-rickshaws: the financing facility has not yet been implemented, so no banks are directed so far to initiate financing for EVs.



## Difficulties in accessing finance further undermines equitable distribution

Commercial banks prioritise risks and returns, leading to a lack of interest in green lending due to perceived concerns regarding renewable energy financing.

A small fraction of banks engaged in green lending have imposed stringent access terms, undermining the objective of ecologically balanced transformation.

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# Conclusion and recommendations

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# Key Findings

- 1 Distributed Solar PV (DSPV) and Electric Vehicle (EV) lending in Pakistan is still in its infancy, but key policy measures can unlock green finance.** Presently only a small fraction of banks offer financing for Electric Vehicles (EVs) and Distributed Solar Photovoltaic (DSPV) systems, indicating a significant lack of interest in clean energy financing.
- 2 Critical limitations within regulations for green lending hinder broader renewable financing initiatives.** Key constraints include the voluntary regulations of the tailored financing facilities, taxonomy issues, as well as implementation lags.
- 3 Bureaucratisation and securitisation of loans undermines the equitable distribution of green loans.** Banks that have engaged in green product lending have designed operational processes and features—in terms of administrative processes, eligibility criteria, collateral valuation, etc.—such that they have reversed policy support for a more equitable distribution.
- 4 Increasing the effectiveness of green lending is critical to boost an effective energy transition.** To reach the energy transition targets, a set of priority actions must guide and accelerate green banking and renewable energy lending. Such actions can include strengthening existing regulations for example through effective implementation, improved taxonomy; and bolstering confidence of the banking sector through risk-sharing mechanisms and the creation of formal secondary markets.

# Proposals for increasing the effectiveness of green lending facilities to boost effective energy transition

## 01

**Revisit the regulatory framework governing green financing to ensure a people-centred transition.**

Strengthen existing regulations through improved taxonomy, obligatory financing, and effective implementation of the rolled-out regulations.

## 02

**Bolster the confidence of banks towards green lending.**

Given that RES financing is a relatively new market for many bankers, there is high concern among banks regarding the risks of defaults. Confidence of banks can be bolstered by establishing effective risk-sharing mechanisms and creating formal secondary markets for renewable energy product

## 03

**A shift to ecological sustainability should go beyond “business-as-usual” capitalist finance approaches, to foster favourable financial conditions for scaling up clean energy.**

Our analysis reveals that the bureaucratisation and securitisation of loans is further undermining the equitable distribution of green loans. Overall, difficulties in accessing finance must be eased for a more balanced transition.

## 04

**Rigorous monitoring and evaluation mechanisms must complement green lending regulations to ensure effective implementation.**

By integrating monitoring and evaluation as integral components of regulatory frameworks, policymakers can enhance transparency, accountability, and effectiveness in driving the green lending agenda forward.

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# Thank you for your attention!

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Do you have any questions or comments?

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