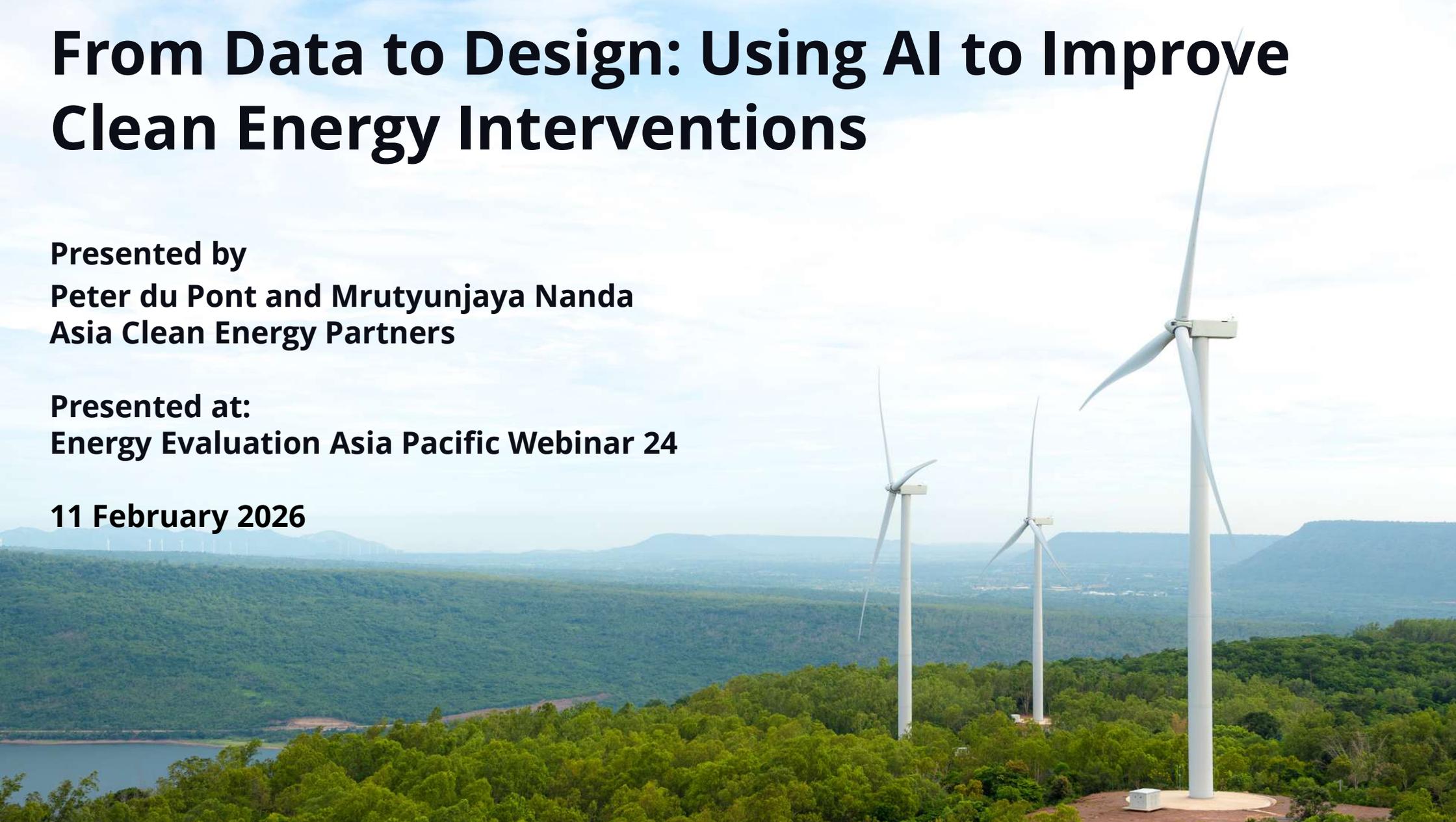# From Data to Design: Using AI to Improve Clean Energy Interventions

Presented by
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Presented at:
Energy Evaluation Asia Pacific Webinar 24

11 February 2026

Topics Covered

1. Context of our Involvement

2. Role of Stakeholder Interviews in Program Design

3. Evolution of Interviews for Program Design

4. Case Study 1 – ADB : Analyze the Nature and Status of Private Sector Development in the Philippines

5. Case Study 2 – ADB: Private Sector Operation Department's Climate Ambition Plan

6. Implications for Evaluation of Energy Transition Projects

Context of Our Involvement

About ACE Partners

- **Asia-based energy transition advisory firm**, working at the interface of energy systems, policy, and finance, with a focus on Southeast Asia.

- **Provide analytical and programmatic support** for clean energy and decarbonization, including market and technology assessments, policy diagnostics, and program design.

- **Known for combining technical depth with regional knowledge** and structured stakeholder engagement to translate analysis into implementable transition pathways.
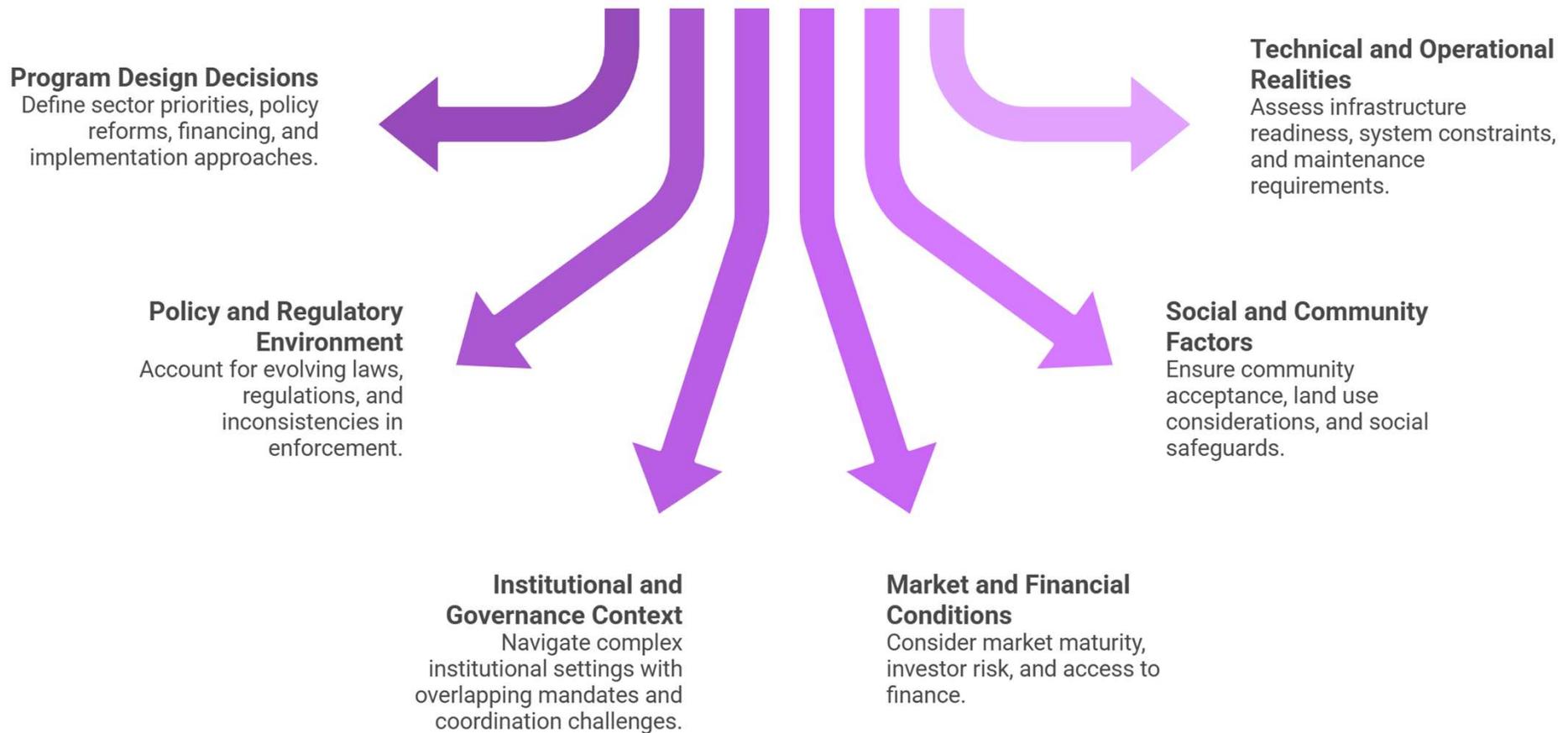
About Us

- **Peter du Pont** - P**hD in energy policy with a focus on consumer behavior**; ~40 years of experience in energy efficiency, renewable energy, and climate policy, spanning research, policy design, and applied energy finance.

- **MJ Nanda – Power systems engineer with experience in utility-scale solar and wind development** and as an owner's engineer; currently focused on energy-system studies, market and technology assessments, and program design for energy-transition technologies and financing.

Role of Stakeholder Interviews in Program Design

What factors should be considered in program design?

Program Design Decisions
Define sector priorities, policy reforms, financing, and implementation approaches.

Technical and Operational Realities
Assess infrastructure readiness, system constraints, and maintenance requirements.

Policy and Regulatory Environment
Account for evolving laws, regulations, and inconsistencies in enforcement.

Social and Community Factors
Ensure community acceptance, land use considerations, and social safeguards.

Institutional and Governance Context
Navigate complex institutional settings with overlapping mandates and coordination challenges.

Market and Financial Conditions
Consider market maturity, investor risk, and access to finance.

Why Stakeholder Involvement Matters

Program Relevance
Linking stakeholder insights to research to improve decision-making.

Sustainable Outcomes
Building trust and reducing risks through stakeholder engagement.
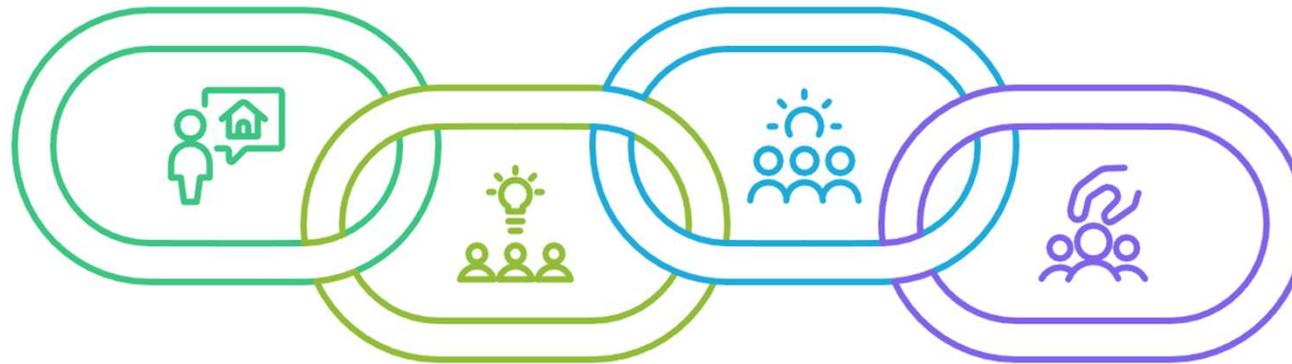
Planning Impact
Early stakeholder involvement in planning to enhance project outcomes.

Participatory Practice
Emphasizing shared ownership and local understanding in development.

Evolution of Interviews for Program Design

Evolution of Interview Technology

1980s – Manual qualitative capture:
- Reliance on contemporaneous handwritten notes; analysis was retrospective, interpretive, and constrained by selective capture and recall.

1990s – Audio-supported analysis:
- Cassette recordings enabled fuller recall, but transcription and **manual coding of keywords and themes** were labor-intensive, limiting scale and iteration.

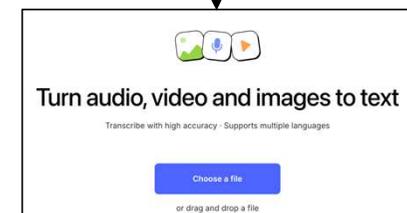**2000s–2010s – Digitization and outsourced transcription:**
- Digital recordings and third-party transcription improved completeness, but qualitative analysis remained largely linear, slow, and resource-intensive.

2023 onward – Post-ChatGPT qualitative workflows:
- Near-real-time transcription, summarization, thematic clustering, and cross-interview synthesis enable rapid iteration, comparative analysis across large datasets, and more explicit testing of assumptions and hypotheses.

What still requires human judgment:
- Framing research questions, assessing credibility and bias, weighting evidence, interpreting context and causality, and translating analytical insights into defensible conclusions and recommendations.
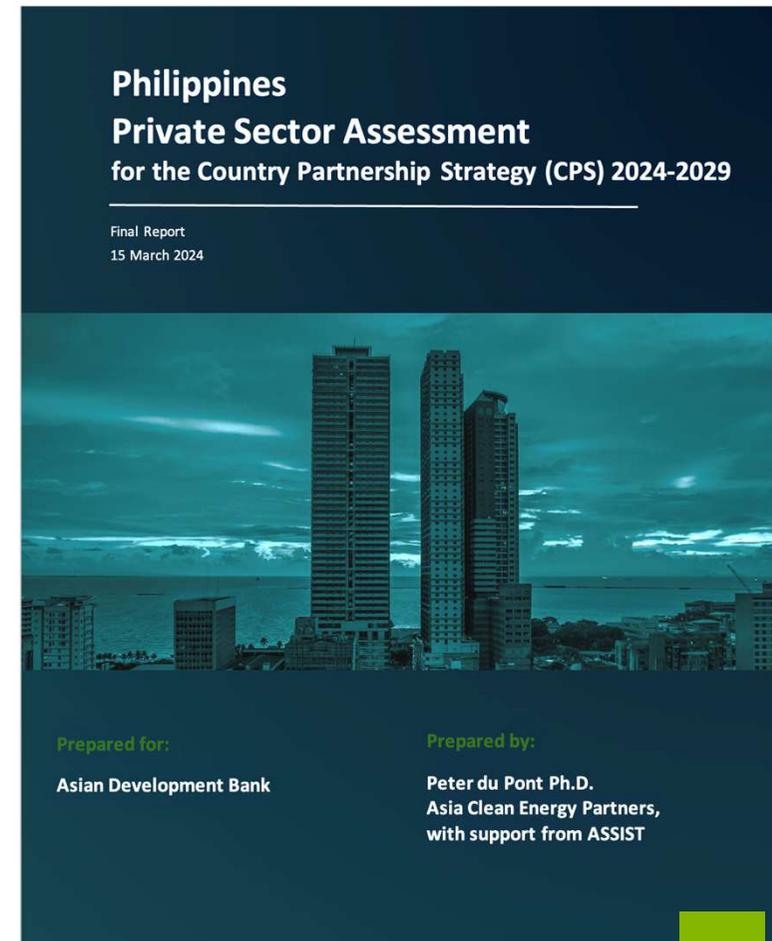

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Case Study 1: Asian Development Bank (ADB)
Analyze the Nature and Status of Private Sector Development in the Philippines

Project Details

- **Objective**: Analyze the private sector landscape in the Philippines to inform the preparation of the ADB Country Partnership Strategy (CPS) 2024–2029.

- Identify key opportunities, constraints, and investment priorities across selected sectors—particularly those aligned with climate action and sustainable development—to enhance private sector engagement and investment.

- **Duration:** November to March 2023

- **In- Country Partner**: Asia Society for Social Improvement and Sustainable Transformation (ASSIST)

- **Sectors Covered**: 1) Energy 2) Transport and Logistics 3) Water and Urban Development 4) Agriculture and Agribusiness 5) Financial Services 6)Carbon Markets 7) Education 8)Health and 9) Information and Communications Technology (ICT)

Philippines
Private Sector Assessment
for the Country Partnership Strategy (CPS) 2024-2029

Final Report
15 March 2024

Prepared for:
Asian Development Bank

Prepared by:
**Peter du Pont Ph.D.
Asia Clean Energy Partners,
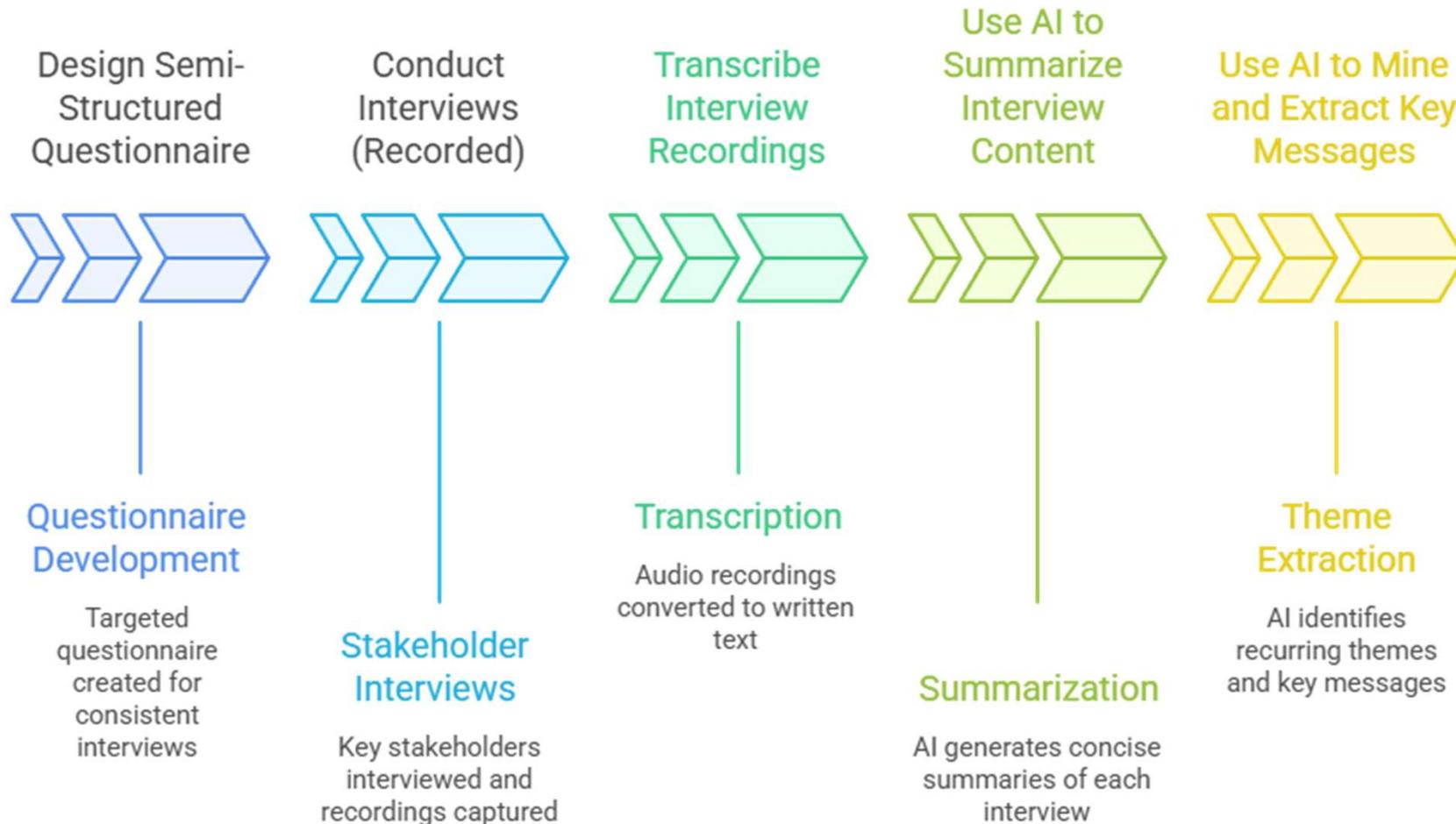with support from ASSIST**

List of Interviewees

We conducted **30+ interviews** with **20 organizations**, spanning ADB sector and thematic groups, key government agencies, donors and NGOs, business associations, and private sector companies.

Category	Organization
Asian Development Bank	• Economic Research and Development Impact (ERDI) • Private Sector Financial Institutions Division (PSFI) • Climate Change and Disaster Risk Management Thematic Group (CCDT) • Office of Markets Development and Public–Private Partnership (OMDP) • Sustainable Development and Climate Change Department – Urban Development Sector Group (SG-WUD) • Public Sector Management and Governance Sector Group (SG-PSMG) • Transport Sector Group (SG-TRA) • Energy Sector Group (SG-ENE) • Finance Sector Group (SG-FIN) • Health Sector Group (SG-HSD) • Social Development Thematic Group (SGFH) • Agriculture and Natural Resources Sector Group (PS-AGRI) • Carbon Markets Group
Government Officials	• Anti-Red Tape Authority (ARTA) • Public-Private Partnership Center (PPPC) • Department of Finance (DOF) • Department of Environment and Natural Resources (DENR)
Donors and NGOs	• Philippine Business for Social Progress (PBSP)
Business Associations	• European Chamber of Commerce of the Philippines (ECCP)
Private Sector Companies	• Cargill Philippines

Interview Process and AI-Driven Analysis

Design Semi-Structured Questionnaire

Conduct Interviews (Recorded)

Transcribe Interview Recordings

Use AI to Summarize Interview Content

Use AI to Mine and Extract Key Messages

Questionnaire Development

Targeted questionnaire created for consistent interviews

Stakeholder Interviews

Key stakeholders interviewed and recordings captured

Transcription

Audio recordings converted to written text

Summarization

AI generates concise summaries of each interview

Theme Extraction

AI identifies recurring themes and key messages

Key Takeaways

Beyond Desktop Research -

Stakeholder insights complemented desk-based analysis by uncovering informal practices, institutional frictions, and emerging trends not reflected in reports or datasets.

Private Sector Reality Check

Engagement with investors and firms provided direct insight into feasibility, risk perception, and bankability—critical for shaping effective private sector–oriented CPS interventions.

Informing Sector Focus and Sequencing

Interviews helped refine sector prioritization and sequencing by identifying where reforms, capacity building, or financing interventions would have the greatest impact.

Operationalizing the CPS

On-the-ground perspectives informed realistic ADB entry points, implementation approaches, and partnership opportunities, strengthening the CPS's operational relevance and credibility.

Case Study 2: Asian Development Bank (ADB)
Strategy for ADB's Private Sector, $13 Billion Climate Ambition Plan

Project Details

Objective: Review and update PSOD plan to contribute to achieve $12 billion of private sector climate investment by 2030

(Part of **their then-mandate** as being the "Climate Bank for Asia and the Pacific".)

Goals

Goal 1: To **identify immediate opportunities** for a credible pathway to reach $12 billion of climate finance OCR and $18-$30 billion of mobilization by 2030 (2019-2030)

Goal 2: To **identify blue sky opportunities** for PSOD climate finance that will exceed the $12 billion, or will set PSOD up to far exceed $12 billion cumulatively in the following 12 years, especially given ongoing discussions about capital adequacy framework

Goal 3: To **identify inspiring examples**, **barriers** to achieving this goal

Goal 4: To identify **next steps**

Principles

▶ **Ambitious**

(focused on deep decarbonization and adaptation)

▶ **Strategic**

(considers opportunities and trade offs)

▶ **Pragmatic**

(origination-focused and addressable by PSOD)

▶ **Must count**

(focused on joint-MDB approaches to climate finance

Research Methodology

Identify Stakeholders:

• Along with the client, we developed a comprehensive list of more than 40 PSOD staff to invite for interviews.

Develop Interview Guide:

• We developed a semi-structured interview guide covering 4 main topics: Opportunities, Blue Sky Ideas, External Barriers, Internal Constraints, and Exemplary Projects .

Conduct Interviews:

• Overall, _**we interviewed 40 ADB staff, in-person and online,**_ over a three-week period from 20 November through 8 December 2023.

Analyze Data:

• We transcribed the interviews and then summarized each of them to highlight the key findings from each of them. We then looked for patterns across the interviews.

Communicate Results:

• Key takeaways from the interviews are summarized in this presentation. They will later be integrated with the findings from the Desktop Research.

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List of Interviewees

We conducted interviews across a broad range of ADB departments, divisions, units, and thematic teams within the Private Sector Operations Department, reflecting cross-functional perspectives from investment, advisory, climate finance, portfolio management, and transaction support functions.

ADB Department / Unit / Team
1.Private Sector Operations Department (PSOD)
2.Private Sector Financial Institutions Division 1 (PSIF 1)
3.Private Sector Financial Institutions Division 2 (PSIF 2)
4.Structured Projects Unit
5.Trade and Supply Chain Finance Program (TSCFP)
6.Guarantees and Syndications Unit
7.Investment Funds and Special Initiatives Division
8.Climate Finance Team
9.Food and Agribusiness Investment Team
10.Health and Education Investments Team
11.ADB Ventures
12.Portfolio Management Division
13.Transaction Support Division
14.Southeast Asia Green Finance Hub
15Office of the Vice-President

Key Takeaways (results of our research)

(1) Enabled Better Strategic Prioritization
- By systematically distinguishing between immediate and "blue sky" opportunities, the engagement supported PSOD in focusing resources on interventions that balance impact, feasibility, and speed of execution.

(2) Surfaced Internal and External Constraints Early
- About half-way through (~20 interviews), we were able to share detailed interim feedback with ADB Management. This highlighted process, resourcing, and risk-related constraints that we could focus on as we completed the comprehensive set of 40 interviews

(3) Strengthened Alignment Across PSOD Teams
- The process brought together perspectives from across PSOD, reinforcing shared understanding of climate priorities while clarifying where alignment between strategy, incentives, and resources needs strengthening.

(4) Informed Practical Changes to Origination and Execution
- Insights from staff helped identify where additional technical assistance, product innovation, or process adjustments would have the greatest impact on scaling climate finance.

(5) Built management confidence and institutional buy-in for higher ambition
- The comprehensive interview process (engaging 40 senior staff across PSOD) gave management visibility of the date and confidence in its credibility. It also built staff ownership and buy-in for a more aggressive, actionable pathway to reach and potentially exceed the $12 billion climate finance target.

Reflections on Our Use of AI for Design and Evaluation of Energy Transition Projects

Lessons Learned by a Couple of Practical Optimists

(1) We can talk to more people—and actually hear what they're saying

- AI lets us engage a much wider range of stakeholders without flattening their views or relying on selective notes and memory.

(2) Big targets work better when they reflect how work actually gets done

- When frontline realities are captured and analyzed, climate ambition stops being abstract and starts looking executable.

(3) Earlier feedback creates a more nimble process, leads to better decisions

- Insights now show up while strategies are still being shaped, not months later in reports that arrive after decisions have already hardened.

(4) People support if they recognize themselves in the narrative

- When staff see their experience reflected accurately, buy-in follows—and institutions are more willing to commit to genuinely ambitious pathways.

(5) AI saves time; judgment still needs to be based on the evidence

- Machines can organize and summarize, but deciding what matters, what's credible, and what to do next remains a human responsibility.

Thank you

Peter du Pont, Ph.D.

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