Presenter 5

# Is PPP a Good tool for Responding to Socio-Economic Infrastructure Demand?

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# Is PPP a Good tool for Responding to Socio-Economic Infrastructure Demand?

## PRESENTATION

2026

# Agenda

**01** **Socio-Economic Infrastructure Demand and the Role of PPP**

Fiscal constraints, financing gaps, and the case for private participation

**02** **Mongolia's PPP Framework and Experience**

Legal evolution, core principles, and the project development process

**03** **PPP Opportunities and Lessons Learned**

Priority sectors, domestic lessons, and international cooperation

**04** **Way Forward**

From project pipeline to implementation, and priorities for 2026–2027

1.1 SOCIO-ECONOMIC INFRASTRUCTURE DEMAND AND THE ROLE OF PPP

# Infrastructure Demand and Fiscal Constraints

*Large demand. Limited fiscal space.*

### Rising Demand

Growing demand for socio-economic infrastructure across energy, transport, water, and urban services.

### Budget Limitations

Limitations of public budgets and traditional public procurement to meet this demand at scale.

### The Financing Gap

Private capital plays a growing role in closing the infrastructure financing gap.

**Infrastructure demand → Financing gap → Private capital & expertise**

*Note: the 88 projects above reflect the full national infrastructure pipeline (Five-Year Guidelines); the subset currently structured as PPPs is discussed in Section 3.*

**MONGOLIA'S FIVE-YEAR DEVELOPMENT GUIDELINES, 2026–2030**

**88**

major projects & initiatives identified

**> $19.45 bn**

total financing requirement

**~10%**

of that can be financed by the State Budget

*PPP combines financing, technology, operational expertise, and appropriate long-term risk allocation.*

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1.2 SOCIO-ECONOMIC INFRASTRUCTURE DEMAND AND THE ROLE OF PPP

## Why PPP?

### Mobilizing Private Finance

Brings additional private-sector capital to fund infrastructure investment

### Expertise & Innovation

Applies private-sector expertise, technology, and innovation to project delivery

### Life-Cycle Efficiency

Improves efficiency across design, construction, and long-term operation

### Better Public Services

Raises the quality and reliability of public-service delivery

### Optimal Risk Allocation

Allocates risk to whichever party — public or private — can best manage it

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2.1 MONGOLIA'S PPP FRAMEWORK AND EXPERIENCE

# Evolution of the PPP Framework

*A fundamental shift in Mongolia's approach*

**1**

2010

### Concession Law

Mongolia's first framework for private participation in infrastructure

**2**

2022

### New PPP Law Adopted

The Law on Public-Private Partnership is adopted

**3**

31 Dec 2023

### PPP Law Enters Into Force

The new legal framework becomes effective

**4**

2024

### PPP Center Established

Gov't Resolution No. 23 (7 Aug 2024); registered as a legal entity on 18 Oct 2024

**FROM: CONSTRUCTION & CONCESSION FOCUSED**

**TO: WHOLE-LIFE-CYCLE PPP MANAGEMENT**

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2.2 MONGOLIA'S PPP FRAMEWORK AND EXPERIENCE

# PPP Center: Mandate and Core Functions

*Per Article 12 of the Law on Public-Private Partnership*

**1**

Support implementation of PPP legislation and develop sustainable partnerships between the state and the private sector

**2**

Receive and provide professional assistance on partnership proposals from sector agencies, aimags, the capital city, and the private sector

**3**

Conduct preliminary assessment, full feasibility studies, and technical-economic and risk analysis for candidate projects

**4**

Present assessment results to relevant ministries and agencies and determine suitability for PPP implementation

**5**

Arrange financial analysis for privately-initiated proposals, with support, and report results to the relevant authority

**6**

Monitor and report on financial and risk factors affecting project implementation

**7**

Maintain required regulations, model contracts, and related documentation in a unified, publicly accessible database

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2.3 MONGOLIA'S PPP FRAMEWORK AND EXPERIENCE

# PPP Project Development Process

*Projects must demonstrate suitability before becoming PPPs*

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | ▶ PPP CONTRACT |
|---|---|---|---|---|---|---|---|
| Project Proposal | Preliminary Assessment | Full Feasibility Study | MED Review | MoF Review | Government Approval | Private Partner Selection | |

TOTAL DURATION: UP TO 6 MONTHS

THREE FUNDAMENTAL QUESTIONS

- Is the project necessary?
- Is PPP the right delivery model?
- Can Government and users afford it?

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3.1 PPP OPPORTUNITIES AND LESSONS LEARNED

# Priority Sectors for PPP

- Energy
- Transport & Logistics
- Roads & Railways
- Airports
- Water & Wastewater
- Waste Management
- Smart Infrastructure & Metering
- Other Public Infrastructure & Services

**PIPELINE:** 20 projects currently under study or implementation across these sectors — see the pipeline detail on the following page.

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3.2 PPP OPPORTUNITIES AND LESSONS LEARNED

# Current PPP Project Pipeline

*A sample of 8 of the 20 projects currently under study or implementation via PPP*

| Project | Location | Cost | Timeline | Sector |
|---|---|---|---|---|
| Petroleum Products Storage Depot Construction | Ulaanbaatar, Umnugovi, Uvs | $ 210.1M | 2028-2057 | Logistics |
| Gold Refinery Construction | Ulaanbaatar | $ 36.4M | 2026-2042 | Logistics |
| Tavantolgoi 450MW Thermal Power Plant | Umnugovi | $ 847.9M | 2027-2055 | Energy |
| Choibalsan–Khuut–Bichigt Railway (433 km) | Dornogovi, Sukhbaatar | $ 945.5M | ADP 2026 | Rail |
| Heat pump-based power plant cooling water energy recovery project | Ulaanbaatar | $ 27.6M | 2029-2058 | Energy, Water-wastewater |
| 19 schools | Ulaanbaatar, Darkhan-Uul, Erdenet | | - | - |
| Murun–Uliastai Road (262 km) | Khuvsgul-Zavkhan | $ 165.0M | 2025-2049 | Road |
| Artsuur–Nariinsukhait–Shiveekhuren Railway | Umnugovi-Bayankhongor-Govi-Altai-Uvs | $ 3.71M | 2025-2053 | Rail |

**20 projects in total • Combined estimated cost: ~MNT 27.4 trillion**

*ADP = Annual Development Plan. Table shows 8 representative projects; the total reflects all 20 projects in the current pipeline.*

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## 3.3 HEAT PUMP-BASED POWER PLANT COOLING WATER ENERGY RECOVERY PROJECT

### Project Overview

This project aims to address Ulaanbaatar's urgent energy and environmental challenges by recovering waste heat from CHP-4 cooling water and wastewater treatment graywater to create a sustainable, eco-friendly heat source. Spearheaded by POSCO International in collaboration with Mongolia's Ministry of Energy, the initiative seeks to lower coal consumption, curb air pollution, and diversify the city's thermal energy infrastructure. The project aligns directly with national priorities, including Mongolia's NDC 3.0, the Long-Term Low-Emission Development Strategy, and the Law on Public-Private Partnerships. It replicates POSCO's proven Tancheon E&E benchmark in Seoul—a 15-year BOT operation delivering 63 Gcal/h of heating capacity while reducing greenhouse gas emissions by 34,000 $tCO_2$ annually..

| No. | Indicators | Description |
|---|---|---|
| 1 | Project location | Ulaanbaatar, Mongolia |
| 2 | Facility Specifications | Heating Capacity: 63 Gcal/h (9 Gcal/h × 7 units)<br>Water Volume: 300,000 m³/day (treated wastewater) |
| 3 | Annual Supply Capacity | 200,000 Gcal/year |
| 4 | Project Duration | 2028-2057 |
| 5 | PPP Contract Type | BOT (Build – Operate – Transfer) |
| 6 | Project Status | Preliminary evalution completed |
| 7 | Budget | $ 26,000,000 |
| 8 | Model overview | 15-year BOT contract (2014–2029) with Seoul Metropolitan Government utilizing heat pumps to recover waste heat from wastewater |

*Location of CHPP #4 Power Plant*

*Model of CHPP #4 Power Plant*

4.1 WAY FORWARD

# From Project Pipeline to Bankable Projects

*Mongolia's next challenge is implementation*

**2022–2023**

### Legal Reform

- Adoption of the new PPP Law and its entry into force

**2024–2026**

### Institution Building

- Institution building
- Capacity development
- Pipeline development

**2026–2027+**

### Bankability

- Private partner selection
- Financial close
- Implementation

**INTERNATIONAL COOPERATION:** JICA • ADB • EBRD • Development Partners • Private Investors

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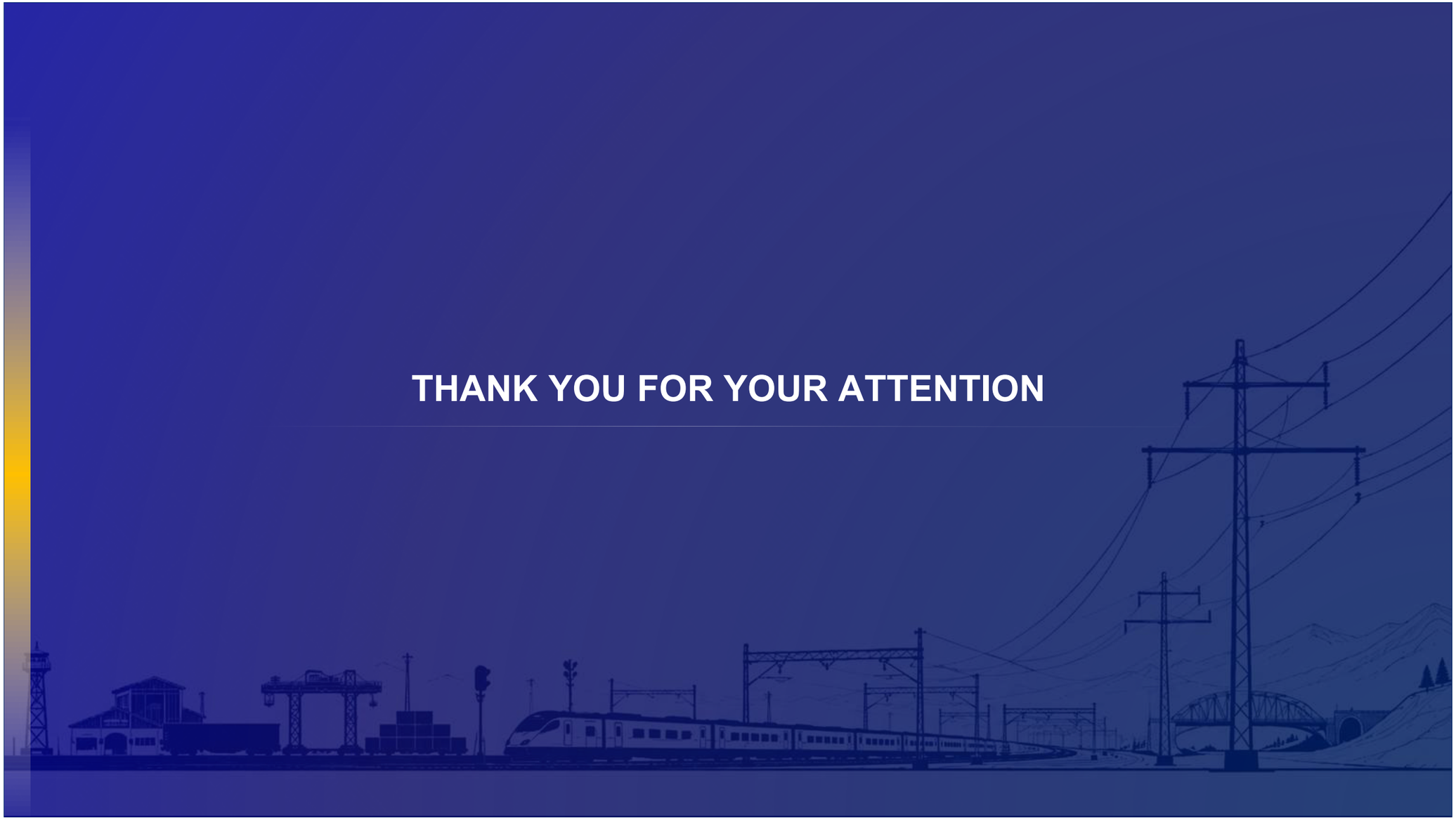
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