Central Asia’s First District Heating project through Public-Private Partnership

Tashkent District Heating Project

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Project Context

• Legacy deficiencies in the design of the DH network inherited from Soviet times have been further compounded by significant **under-investment in maintenance, rehabilitation, and modernization** since its establishment in the 1950s.

• About **30% lower flow** circulates in the return pipes than in the supply pipes, **only 5% of flow** in the network is used as sanitary hot water.

• **25% efficiency is lost** as a result of leakage in the network and water drainage in buildings.

• Most of the distribution pipelines are **too large** and there are **no pre-insulated** type pipelines in the network.

Private sector led investment and expertise is needed to deliver efficiency and performance improvement.
Key Considerations for the PPP

- DH sector in Uzbekistan is a highly regulated environment
- Nascent PPP regime (at that time); Untested market for distribution PPP
- Huge investment cost; sovereign funding inherently cheaper than private funding
- Sufficient level of involvement required of Private Partner (long-term efficiency) and Public Partner

The *affermage* structure will effectively incentivize the Private Partner while ensuring the Public Partner’s involvement as implementor and regulator.
Project Structure: Affermage

- Affermage allows for a **well-balanced risk/reward structure**.
- **Large efficiency gains** over a **long period of time** and address the challenges of implementing the required investment plan for the Project.
- Most **cost optimal solution** for implementation as sovereign funding is much cheaper than private funding.

**Why not a Concession contract?**

- **Higher cost of capital** of private party will lead to higher project cost and end-user tariffs
- **Time delay** (~12-18 mos) due to increased project preparation time and financial closure

**Why not an O&M contract?**

- Will result in some efficiencies but operations cannot be guaranteed for **30 years without significant investments**
Results

After 2 years:

After full implementation:

40% Reduction in network heat losses

60% Reduction in water leakage

15% Reduction in electricity consumption

After 10 years:
Thank you