# Gumuskoy Geothermal PP, Turkey

First Geothermal Dialogue Padraig Oliver, Analyst

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# Why is Gumuskoy GPP interesting

### Development and Financing model

- Heavy exploration and development risk appetite from developer
- Public-private financing

Debt				
EBRD MidSEFF	Loan	Public	24.9	50%
Yapikredi	Lease Finance	Private	9.6	20%
Equity				
BM Holding	Equity	Private	15.1	30.0%
Total Project Cost			49.6	

# Context for the Project

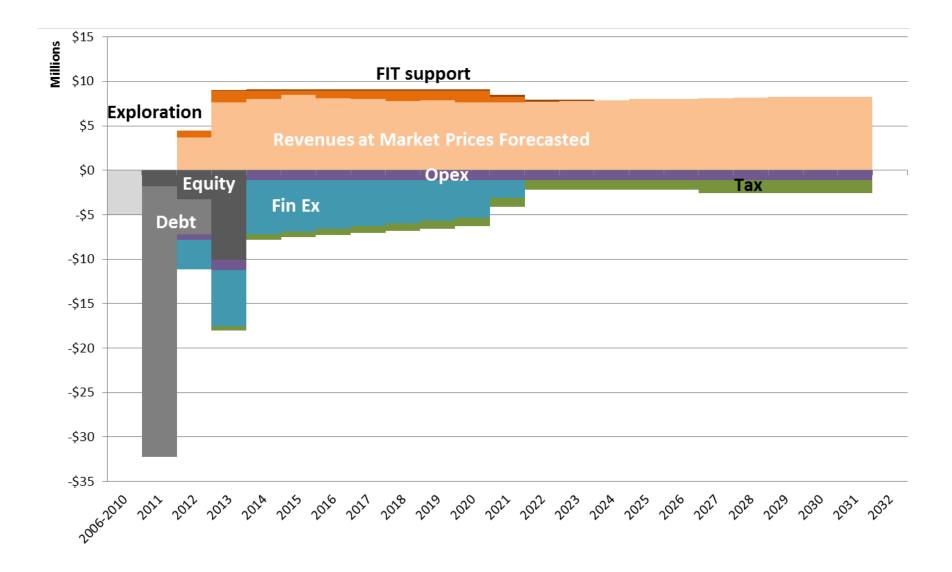
#### Policy and regulatory changes

- 2007 Geothermal law
- 2010 Renewable Energy law amendment

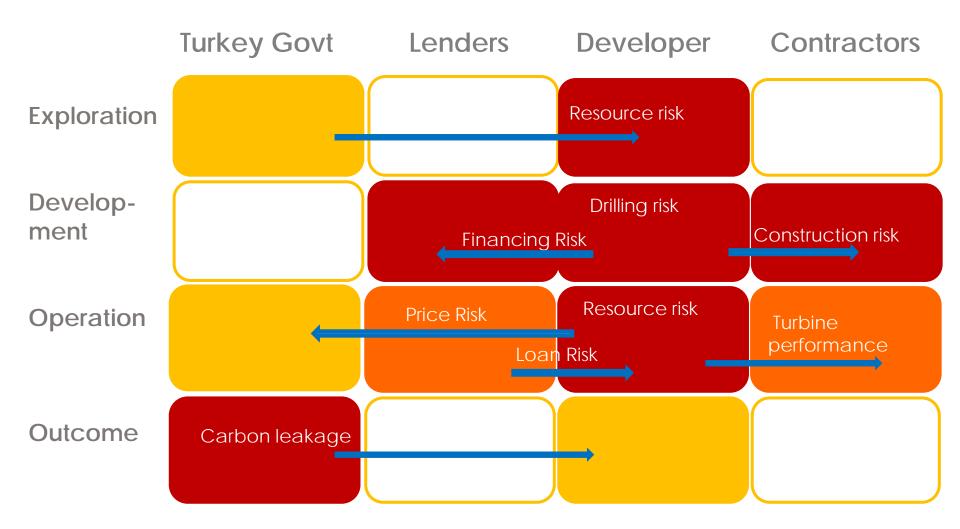
#### Project Timeline



# Gumuskoy GPP: Role of public finance



## Risk Allocation and Mitigation



# Gumuskoy GPP: Early Takeaways

### Challenges

 Private-sector risk appetite for exploration

 Provide certainty to cover cost of risk capital

 Access to debt capital at suitable rate and tenor

### Responses/Results

Transferableskills/knowledge base to manage risk

10 year FIT plus high equity IRR

2-3 year longer tenor
 at 200-250bps
 cheaper cost of
 capital

# Gumuskoy GPP: Early questions for policy

- Managing carbon leakage risk
- Encouraging significant private activity vs limited role in policy targets

### Beyond Turkey – can private sector take exp. risks

- Transferability of existing drilling and geological resource management skills/knowledge incountry
- Identifying private sector capability/appetite
- Identifying local banks to channel public finance

#### Thank you!



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#### Questions for Discussion

- What are the implications for private sector exploration model for growth of geothermal in Turkey?
- What are the technology and financing challenges of medium-enthalpy binary plants
- What is the role of international development finance for ensuring project feasibility?
- Were all risks allocated to those best suited to manage them?
- How will future changes to regulations alter project development?
- What are Government's lessons from this type of project for their geothermal development strategy going forward?