











MRC

## Launch of the call for Expression of Interest (EoI)

WIETZE LISE, PRINCIPAL CONSULTANT, RSM CONSULT CONSULTATION WORKSHOP, ZOOM, 26 JANUARY 2021

## Contents of EoI should demonstrate

- **1. Geothermal technical:** A high potential of finding a geothermal resource based on submitted information
- **2. Business Plan:** The feasibility of the drilling plan when considered in the context of the proposed geothermal energy use, and the applicant's strength in financing the drilling plan and in following up on their project
- **3. Safeguards:** The likelihood that environmental and social issues will be properly implemented and effectively managed from the beginning of the project



## Key qualification criteria

- 1. Hold a valid exploration license.
- 2. Have finished surface exploration, including geological, geophysical, and geochemical exploration.
- 3. Have constructed initial Conceptual Geothermal System Model (simple or extensive)
- 4. Have selected drilling targets (depth, flow rate, temperatures), well types (shallow/deep and vertical/directional) and conceptual well design.
- 5. Have prepared a business plan.



### 1. Geothermal – technical

- Conceptual model and list of data behind the conceptual model.
- Drilling plan
- References demonstrating previous drilling experience and CVs of key experts.
- If there are already exploration wells, provide an indication of the information from these wells.

Indicator	Unit	Value
Gross capacity per well	MWe or MWth	
Gross conversion efficiency (for power plants only)	%	
Expected average flow rate per well	kg/s	
Estimated reservoir temperature	°C	
Estimated depth of the well (True Vertical Depth-TVD) Diameter of the well at target depth	m (from surface) " (inch)	
Well type (vertical/directional)	-	
Wellhead location of the wells under RSM	N E coordinates (ED50-UTM-6° coordinate system)	
Expected/predicted CO2 emissions	g CO2/kWh	



### 2. Business Plan

The **structure** of Beneficiary's consortium or Joint Venture: description of Beneficiary.

- Submission of financial statements for the past 3 years: balance sheets, profit/loss statements and income statements.
- This should be submitted for the proposed special purpose entity and the group this belongs to.

Indicator	Unit	Value
Total gross installed capacity aimed at	MWe or MWth	
Own consumption	MWe or MWth	
Annual duration of maximum power or heat	hour per year	
Number of wells under RSM	#	
Number of production wells	#	
Number of reinjection wells	#	
Average sales price year 1-10	USD/MWh	
Average sales price year 11-25	USD/MWh	
Estimated Drilling cost per well	USD	
Total capital cost of power plant or direct use facility	USD	
Total annual operating costs	USD per year	
Expected IRR	%	
Expected NPV (at 8% discount factor)	USD	



**EXPRESSION OF INTEREST** 

### 3. Safeguards

#### Social issues:

- Land use status in relation to land based livelihoods; use for agricultural purposes etc.
- Land acquisition needs (whether voluntary purchase or expropriation will be sought).
- Current and recent use of the land by project affected people and communities.

Indicator	Unit	Value
Project classification under Turkish EIA Regulation (I or II)	-	
Project classification under World Bank Environment and		
Social Framework (Category A, Category B, Category C)		
Distance to nearest protected area/sensitive habitats	km	
Distance to nearest area of cultural heritage and its sensitivity	km	
Distance to nearest settlement	km	
Distance to nearest water body	km	
Distance to nearest agricultural area	km	
Amount of estimated expropriation / land acquisition from	m²	
private landowners (including lands to be rented)		
Estimated number of project-affected people (PAP)	#	
Estimated number of project-affected settlements	#	

#### **Environmental issues:**

- Information on project status with respect to Annex II of the Turkish Environmental Impact Assessment Regulations (Official Gazette Date: 25/11/2014 No. 29186l) and classified as Category B Project under World Bank Environmental and Social Safeguard Policies.
- Proximity to sites of cultural heritage.
- Proximity to protected areas/sensitive habitats with respect to national and international standards.
- Proximity to settlements (residential, commercial, and public).
- Proximity to water bodies, irrigation structures and designated water supply zones for groundwater and surface water.



#### FINANCIAL STATEMENTS

# Description of the Developer

- Submission of financial statements for the past 3 years: balance sheets, profit/loss statements and income statements.
- This should be submitted for the proposed special purpose entity and the group this belongs to.

#### **Profit (-Loss) Statements:**

REVENUE/COST ITEMS	2017	2018	2019
Total Turnover (+)			
Cash O&M Costs (-)			
Depreciation Costs (-)			
Interest Costs (-)			
Other Revenues (-Costs)			
Profits Before Taxes			
Corporate Tax (-)			
Profits After Taxes			

#### **Balance Sheets:**

ASSET/LIABILITY ITEMS	31/12/2017	31/12/2018	31/12/2019
Current Assets			
Fixed Assets (NET)			
- Fixed Assets (GROSS)			
- Accumulated Depreciation (-)			
TOTAL ASSETS			
Current Liabilities			
Long-term Liabilities			
Equities			
- Paid-in Capital			
- Profit-for-Period			
- Accumulated Profits (-Losses)			
- Other Equities			
TOTAL LIABILITIES + EQUITIES			



E&S Subject	Description	Relevant documentation	Is it applicable?	If it is applicable, is it available? (Yes/No)	If it is not available please define expected date for obtaining relevant permit, license, opinion letter, etc. from relevant authority.	
Exploration	Exploration license	Valid Exploration License				
EIA	The projects subjected to selection and elimination process fall into Annex-II of	Project Information File (PIF)				
	EIA Regulation and must obtain "EIA Not Required" certificate	"EIA Not Required" certificate				
	The projects fall into Annex II but	EIA Report				
	obtained "EIA Required" decision	"EIA Positive" certificate				
		Rental / purchase agreement				
	Private land	Official letters on expropriation	_			
		Public interest decision(if any)				
	Public land	Official letters on land acquisition				
Land use	Treasury land	Official letters on land acquisition				
	Agricultural land	Non-agricultural utilization permit				
	Pastureland	Official opinion letter on change of allocation purpose				
	Forest land	Forest permit				
Water	Water extraction Permit	Official opinion letter received by DSİ (State Hydraulic Works)				
Waste	Brine disposal	Disposal Permit /				
waste	Drilling mud disposal	official exchange				
Stakeholders		Records on additional stakeholder				
	Stakeholder engagement	engagements other than those conducted				
		within the scope local regulation				
Zoning	Zoning permit	Valid Zoning Permit				
Import	Import license	Valid Import License				MBO
Other	Other permit requirements listed in PIF or EIA Report	Relevant permits				MRC

