



ESMAP
Energy Sector Management Assistance Program



CLIMATE
POLICY
INITIATIVE



CLIMATE
INVESTMENT
FUNDS

UNEP DTU
PARTNERSHIP



NACIONAL FINANCIERA



ANIVERSARIO

Financing Program for Geothermal Projects.

GLOBAL GEOTHERMAL DEVELOPMENT PLAN

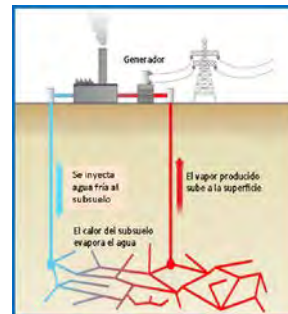
OCTOBER 23-24, 2014

UN CITY COPENHAGEN FN BYEN, MARMORVEJ 51

DENMARK

Advantages.

- 🕒 **Viable:** Is a Proven Technology and economically feasible.
- 🕒 **Efficient:** Sufficient Supply (base load power).
- 🕒 **Clean:** Avoids CO₂ Emissions (positive externality).
- 🕒 **Economic:** Low levelized cost (US\$0.04 – 0.10/kWh).
- 🕒 **Possible:** México occupies the 4th Global position with a 840MW of installed capacity. Only behind the EEUU, Filipinas and Indonesia.
- 🇲🇽 **Mexico's Potential :** 10 to 11 GW.
- 🇲🇽 **North – Center,** the best sites.



There may be Power generation from 150 ° C.

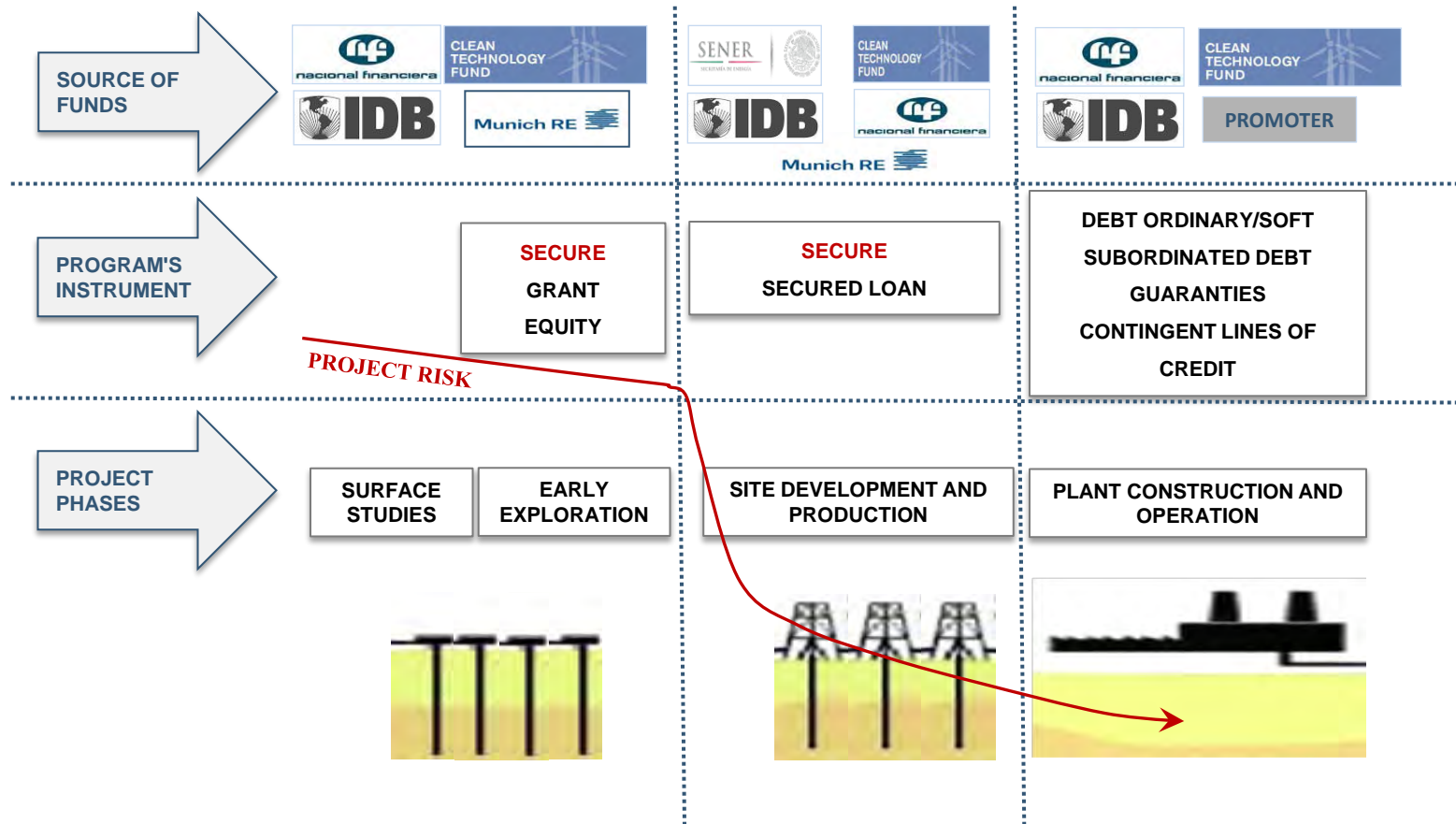
VIDEO



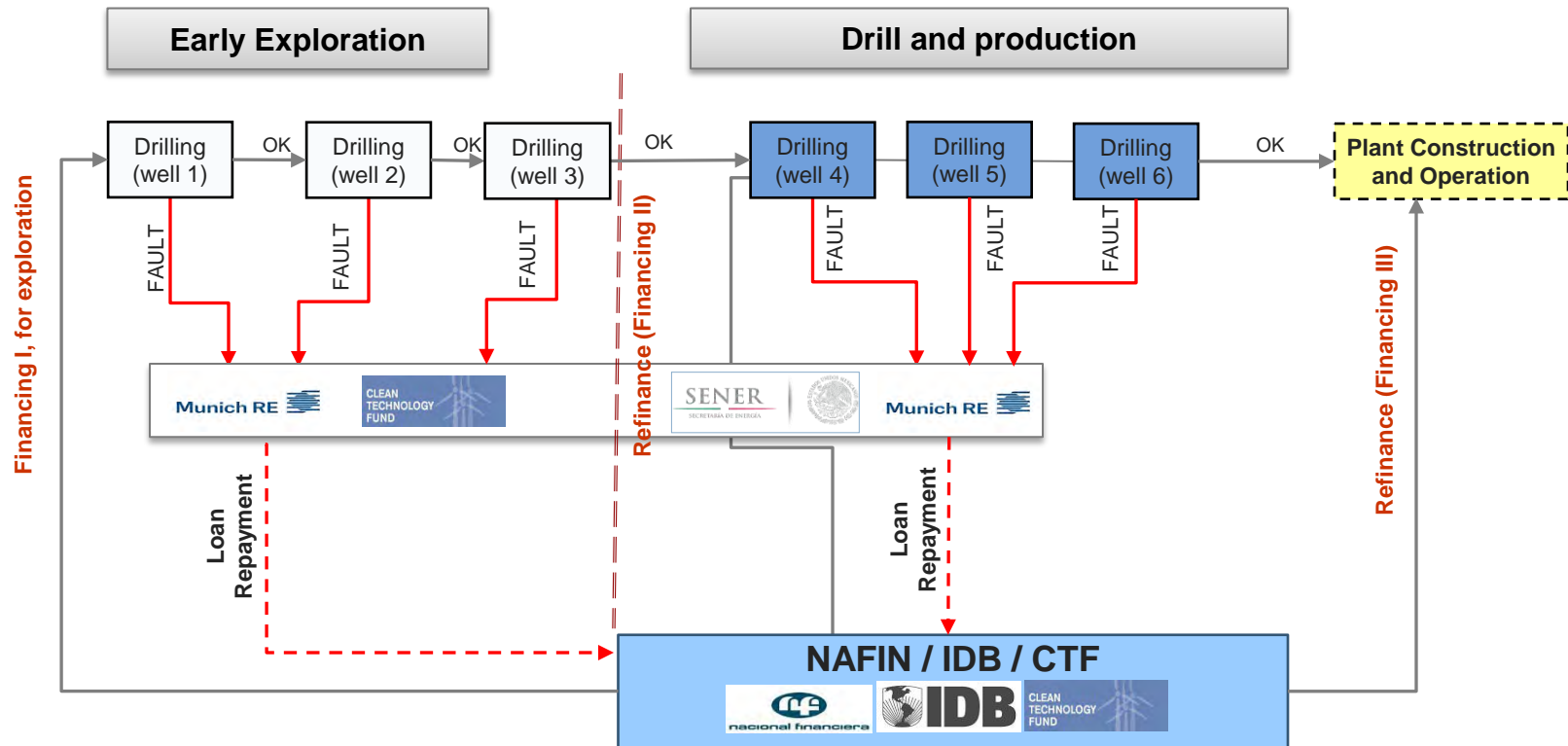
Risks.

Project Stage	Risk Level
Surface Studies	LOW
Early exploration	VERY HIGH
Site development and production tests	HIGH
Construction and plant operation	MEDIUM-HIGH

Financing scheme proposed.



Scheme's diagram of flow.



Program's Sources and applications of Funds.

Millions US dollar figures.

Technical Assistance		Early Exploration		Productive Exploration		Program's Total		
SOURCE	US\$	SOURCE	US\$	SOURCE	US\$	SOURCE	US\$	%
• CTF	2.8	• SENER	11.5	• BID	54.3	• SENER	11.5	9.6
		• CTF	20.0	• CTF	31.5	• BID	54.3	45.2
TOTAL	2.8	TOTAL	31.5	TOTAL	85.8	• CTF	54.3	45.2
NON-REFUNDABLE SUPPORT			28.6%	LOANS	71.4%	TOTAL	120.1	100.0

- The Act provides for three stages: prospecting, exploration and exploitation.
- Exploration permits and exploitation concessions may be granted to individuals of Mexican nationality or companies incorporated under Mexican Law.
- The record of survey shall be resolved by SENER in a period not exceeding 10 working days.
- The term of registration is 8 months and SENER may decide if the holder is eligible to obtain an exploration permit for 3 years, extendable for 3 years, for the only time.
- Through the figure of concession, CFE, other productive state enterprises and individuals, shall work to exploit geothermal areas.
- The titles of concession, given the nature and maturity needed projects will have a term of 30 years and may be extended in the opinion of the Secretariat of Energy.

Exploration, by individuals, CFE and other productive state enterprises, require prior permission granted by SENER.