

### Results Matrix

<b>Program's objective:</b>	The objective of the program is to increase power production from geothermal sources so as to contribute to the diversification of the energy matrix and reduce dependency on fossil fuels and GHG emissions in Mexico. To this end, the program intends to scale up investments in geothermal power generation projects by making available a range of financial mechanisms tailored to meet the specific needs of each project's stage of development.
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Indicators	Unit <sup>1</sup>	Baseline	Y1	Y2	Y3	Y4	Y5	Y6	Target <sup>2</sup> (Y10)	Description / Source of verification
<b>OUTPUTS COMPONENT I</b>										
Grants in the form of loan guarantees) provided to geothermal projects with resources from the program	Number	0	2	5	7	8	9	10	n.a.	Values based on guarantee or cost-sharing agreements. Target is inclusive of all projects supported, both successful and failed. Source: Program report from NAFIN. Estimations consider that a beneficiary project that is successful during early exploration may be eligible for support from the program in the production drilling phase.
Insurance premiums for geothermal projects subsidized with resources from the program	Number	0	---	1	2	4	4	5	n.a.	Values based on insurance policies issued. Target is inclusive of all projects supported, both successful and failed. Source: Program report from NAFIN. Estimations consider that a beneficiary project that is successful during early exploration may be eligible for support from the program in the production drilling phase.
<b>OUTPUTS COMPONENT II</b>										
Loans granted to geothermal projects by the program at any stage of development.	Number	0	2	5	8	11	13	15	n.a.	Values based on loan agreements for financing funded with resources from the program. Figures consider loans at any stage of development including loans convertible to grants, insured loans, soft loans, and/or refinancing of projects that move on from early exploration to production drilling and to construction stages. Target is inclusive of all projects financed, both successful and failed. Source: Program report from NAFIN.
<b>RESULTS</b>										

<sup>1</sup> All figures are accumulated.

<sup>2</sup> Due to the long-term nature of geothermal project development, some of the results will only happen after the end of the execution period. A long-term target is set for a timeframe of ten years from the beginning of the program. Financing from sources other than those of the program may be used at later stages of development of projects included in these targets.

Geothermal projects financed that moved on from early exploration to production drilling	Number (%)	0						5 (50)	9 (60)	Percentage measured over the total amount of projects financed (at any stage).
Geothermal projects financed that moved on from production drilling to construction	Number (%)	0						3 (30)	6 (40)	Percentage measured over the total amount of projects financed (at any stage).
Total geothermal power projects financed at some stage by the program that are in operation (producing electricity)	Number	0						3	6	Includes the total number of projects that are functioning in the year indicated. Due to the long maturities associated to these projects, projects financed from early exploration may not be fully operational until past the timeframe of monitoring (see target Y10). Source: Program report from NAFIN.
Geothermal power generation capacity installed in projects financed at some stage by the program	MWe	0						150	300	Includes only capacity ready for production. Due to the long maturities associated to these projects, capacity resulting from projects financed from early exploration may not be installed until past the timeframe of monitoring (see target Y10). Source: Program report from NAFIN. Verified with authorities from the Comisión Reguladora de la Energía (CRE) and the Comisión Federal de Electricidad (CFE).
Electricity production from geothermal projects financed at some stage by the program	GWh/yr	0						1,104	2,207	Source: Program report from NAFIN. Estimations based on the expected capacity installed, an average production factor in Mexico, 24 hours/day, 365 days/yr.
Greenhouse gas (GHG) emissions avoided by geothermal projects financed at some stage by the program	MtCO <sub>2</sub> e /yr	0						0.55	1.1	Tons of GHG emissions that will be reduced or avoided once the plants financed by the program are commissioned. Source: Estimations made following IDB methodology, based on installed capacity (see indicator above), envisaged production, and a 0.5 average conversion factor for electricity generation in Mexico. MtCO <sub>2</sub> e = Millions of tons of CO <sub>2</sub> equivalent

Additional financing from third parties mobilized to complete geothermal projects financed at some stage by the program	Millions of USD	0						491	1,091	Volume of third-party direct finance leveraged by the program for projects supported (both successful and failed). Includes all financing from sources other than the IDB/CTF funding (government, NAFIN and other financial institutions) plus capital/equity. Source: Program report from NAFIN. Estimations based on a 70:30 debt to equity ratio, investment costs of US\$5 million per well and US\$2 to US\$4 million per MW installed.
<b>IMPACTS</b>										
Total geothermal capacity installed in Mexico	MWe	958 <sup>3</sup>						1,108	1,258	Source: SENER, Balance Nacional de Energia
Electricity production from geothermal sources in Mexico	GWh/yr	5,817 <sup>4</sup>						6,921	8,024	Source: Public information from CRE and CFE. Estimations based on the average production factor in Mexico.
Greenhouse gas (GHG) emissions in the Mexican energy sector	Mt CO <sub>2</sub> e	503.8 <sup>5</sup>						377.85	352.66	Source: IDB estimations based on Estrategia Nacional de Cambio Climático (ENACC) and Contribución sectorial a las emisiones, Quinta Comunicación al UNFCCC. MtCO <sub>2</sub> e = megatons of CO <sub>2</sub> equivalent

<sup>3</sup> Total capacity at end-2012 (SENER).

<sup>4</sup> CFE. Sector Eléctrico Nacional. Generación Bruta. 2012.

<sup>5</sup> Mexico's Fifth National Communication to the UNFCCC. Data from 2010.