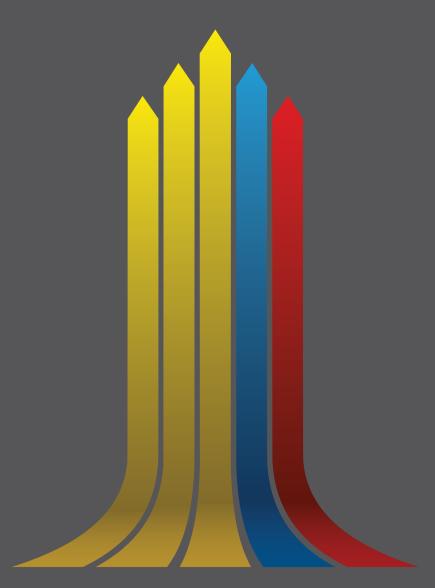
CATÁLOGO DE INVERSIÓN PARA PROYECTOS ESTRATÉGICOS



INVERTIR EN ECUADOR, ES INVERTIR PARA EL FUTURO.

INVESTMENT CATALOGUE FOR STRATEGIC PROJECTS

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Dear friends:

The Government of the Republic of Ecuador, lead by President Rafael Correa Delgado, has invested in the strategic sectors of the country more than 21,000 million dollars between 2007 and 2013, of which more than 12,600 million correspond to the hydrocarbon, 4,900 millions to the electricity sector, 2,268 millions to the telecommunications sector and more than 980 million to the water sector. Thanks to these investments we have substantially modified the energy matrix of the country, going from a 48,33% of the generation of hydroelectricity in 2006, to a 93,53% in 2016; we are also making the access to information technologies and communication more democratic by expanding the coverage of internet to 94% of the homes up to 2017, and increased the area under irrigation of the country by more than 600,000 acres.

As Minister of the portfolio that coordinates Strategic Sectors, I am addressing you to highlight the approach given to the management of natural resources and energy matrix, which is basically characterized by the recovery of planning and the good governance of natural resources, as well as the development and democratization of Information and Communication Technologies, which means that we have established the necessary pillars that will allow Ecuador to have the infrastructure and human capital that are needed to successfully face the change of the productive matrix, guaranteeing the basis for a sustainable development.

The basic principles that guide public management at all levels are responsibility, transparency and equality; the result of the government's management is evident in the country's indicators described below:

Economic indicators. -

- GDP growth rate (annual average 2007-2013): Ecuador= 4,3%. Average in Latin America =3,5% ¹World average=1,6%
- Improvement of the Global Competitiveness Index (2011-2013): has improved from position 101 to 71²
- Level of Public Investment (2011) Ecuador = 11.1% Average in Latin America and the Caribbean: 5,9%.³
- Evolution of the public debt (% of GDP): Reduction of 77% (2000) to 21,8% (2013)⁴

Social indicators. -

- High Human Development Index (2007-2012) Ecuador increased 11 positions in World ranking.5
- Investment level in Higher Education (% of GDP) Ecuador: 1,8% Average in Latin America: 0,8%
- Participation rate poorest quintile in Higher Education: 27,2%.⁷
- Unemployment rate (2012) Ecuador: 4,12 Average in Latin America: 7,5%.8
- Incidence of poverty per income (2006-2012): reduction of more than 10 points.⁹
- Incidence of extreme poverty per income (2006-2012): reduction of more than 5 points.

Source: CEPAL, Banco Central del Ecuador

²Source: WEF: World Economic Forum

³Source: CEPAL - last available version

⁴Source: Ministry of Finances

⁵Source: Human Development Report, UNDP

⁶Source: World Bank, UNESCO

⁷Source: CEPAL

⁸Source: National Institute of Statistics and Census

⁹Source: CEPAL



It is important to mention that in order to reach this productive transformation we have enacted a Law that promotes production and establishes clear mechanisms to complement the public and private sectors as well as clear rules for national and international investors, creating a framework of certainty and trust that promotes productive investment in our country, to move from an economy based on a primary export model to a model based on technology, innovation and knowledge.

With this background, I would like to present to the World's community, on behalf of the Coordinating Ministry for Strategic Sectors and the National Government of Ecuador, the updated edition of the Investment Catalogue for Strategic Sectors.

This Investment Catalogue takes into account investment, financing and other types of opportunities for more than USD \$28,000 millions distributed in USD \$11.886 millions in electricity, USD \$2.026 millions in water sector projects, USD \$9.875 millions in non renewable natural resources, more than USD \$500 millions in environmental projects and telecommunications and more than USD \$3,500 millions for the development of basic industries.

With a clear vision of what we are doing, and a firm commitment to the country, we would like to invite you to participate in the Ecuadorian development. We have clear rules, a favorable political environment and an economic framework favorable for investments.

Rafael Poveda Bonilla

Round Sumble

Coordinator Minister for Strategic Sectors







INTRODUCTION

The construction of infrastructure works that cover the demands of 14 million Ecuadorians, the exploitation of the strategic areas of the Nation to generate resources that will benefit the entire population; as well as, obtaining the resources that will allow us to make these and other works a reality. They are imperative for the Government of Economist Rafael Correa Delgado.

This new edition of the Catalogue of Projects for Strategic Sectors brings up to date the investments and the financing required for the upcoming years and strives to orient investors and financial institutions regarding the opportunities that our country offers to foreign investment. It also constitutes a guide for governments and companies of the world to become familiar with the areas open to investment, as well as the legal and economic conditions that Ecuador offers to its investors.

This document is a joint effort of all the Ministries of State that govern the sectors of Environment, Telecommunications, Hydrocarbons, Mining, Electricity and Renewable Energies, as well as the management of water resources, which has the purpose of strengthening the relations with the countries of the International Community, as well as generating new alliances with strategic partners to build great works of infrastructure and to take advantage of its natural resources.







STRATEGIC SECTORS

The Constitution of the Republic of Ecuador considers that energy in all its forms, telecommunications, natural non-renewable resources, hydrocarbons, biodiversity, genetic heritage, the radio electric spectrum and water, amongst others, constitute the strategic resources of the nation

The Coordinating Ministry for Strategic Sectors proposes, coordinates, executes, articulates, supervises and evaluates the policies, projects, plans and inter-sector actions taken over by the Ministries of Natural Non-Renewable Resources, Electricity and Renewable Energy, Telecommunications and the National Secretariat for Water, to foster compliance with the National Plan for Development and to improve the quality of life of citizens and additionally, executes specific short and medium term programs that will enrich the new model for the sustainable development of the country.

VISION

Assure the rational, sustainable and efficient use of mining, hydrocarbons and water resources, the effective rendering of telecommunications and electricity public services that will generate economic revenues for the country and a social benefit under a minimum environmental impact, orientedto guaranteeing the rights of the population.

OUR STRATEGIC OBJECTIVES:

- 1.BE SOVEREIGN, with self-sufficiency in electric generation, refining of derivatives, access to technologies of Information and Communication, and the management of water resources.
- 2.BE PRODUCTIVE, providing quality in electric and telecommunication services, in the exploitation of hydrocarbons and minerals, and the management of water resources.
- 3. BE INCLUSIVE, in the provision of public services accessible to all the population, and in the access to the exploitation of resources and the revenue produced by them.







ECUADOR

Ecuador limits to the north with Colombia, to the south and east with Peru, and to the west with the Pacific Ocean. There are four distinct geographic regions. The first corresponds to the Sierra or Andean Highlands, which traverse the country from the north frontier with Colombia with the frontier with Peru in the south. The second region corresponds to the Coast, a coastal plain between the Andes and the Pacific. The third is the amazon region, formed by the high basin of the Amazon River. The fourth is the Insular region, constituted by the Galapagos Archipelago located 1,000 Km. from the continent in the Pacific Ocean.

The Ecuadorian territory is divided into 24 provinces, which are divided into cantons, and these into urban and rural parishes. The official language is Spanish.

Ecuador owns a very rich flora and fauna, a reason that has placed it in the list of the most mega diverse nations of the world.

Invest in Ecuador

Ecuador offers a stable regulatory framework in which the potential for investments in its Strategic Sectors is leveraged, with opportunities to generate mutual benefits and achieve the development of our countries.

As a policy of the Government of Economist Rafael Correa Delgado, there is the priority of providing to the public and private sectors, national and foreign, the necessary tools that will allow a consolidation of the conditions required to attract investors.

Transparency in public contracting

All public contracting processes are carried out by the National Services for Public Acquisitions (SERCOP) in Spanish), through agile, transparent, efficient and technologically up-to-date procedures, which facilitate the tasks of control for both contracting entities as well as for suppliers and the citizenry in general.

The National Services for Public Acquisitions (SERCOP) articulates, harmonizes and controls the execution of Works that are carried out with public resources.

For further information please visit: www.compraspublicas.gob.ec







FOREIGN INVESTMENT SECURITY (ORGANIC CODE FOR PRODUCTION)

Equality: : Of conditions and protection for national and foreign investments and investors

Rights: Liberty of production, marketing, imports and exports of goods and services, subject to that stipulated in the Constitution, laws and regulations established under existing legal norms.

Taxation: National and foreign investments are subject to the same Tax Regime.

Resolution of conflicts: In all contracts with foreign investors it is possible to agree on arbitration clauses to resolve controversies that may appear between the State and investors, such conflicts may be submitted to international arbitration in accordance with the treaties signed by Ecuador.

Investment Contracts: Provide stability regarding tax incentives and those determined in the Production Code.







INCENTIVES FOR FOREIGN PUBLIC AND PRIVATE INVESTMENT (ORGANIC CODE FOR PRODUCTION)

Complementary Nature: Foreign investments shall have a direct complementary nature role in Strategic sectors and those that have received priority in the economy that require investment and financing. .

Development and Promotion, of Strategic Sectors:

- Delegate to private initiative the investment in Strategic Sectors, in those cases established by the laws of each sector.
- New projects, of private enterprises for the generation of electricity, under an equal treatment regarding mechanisms and conditions of guarantee and/or payment in the purchase of energy, as that applied to international transactions.

Incentive by Sector: Total exemption of Income Tax for five years, for new investments, as of the operation phase in the sectors that contribute to the change of the energy matrix; strategic substitution of imports; promotion of exports and rural development. For the specific case of projects in Strategic Sectors, applicable to:

- Renewable Energy, including bio-energy or energy from biomass (eolian, biogas, photovoltaic, geo-thermal and hydroelectric power plants of up to 50 MW of installed capacity, tide-generated energy, biomass and the development of the production of bio-fuels).
- Petrochemicals; production of substances on the basis of primary raw materials derived from gas and oil (production of derivates of hydrocarbons, manufacture of plastics in primary form and synthetic rubber, synthetic or artificial fibers, plastic products and items, paints and varnishes, etc.).







OPPORTUNITY TO FINANCE PROJECTS IN ECUADOR (Organic Code of Public Planning and Finances)

Financial Agreement: Financing may establish stipulations related to the participation of companies in the country that provide the loans for the execution of the projects, under the condition that the financing is provided under profitable, advantageous or concessional terms for Ecuador.

Guidelines to Offer:

What is observed when evaluating an offer?

- Companies with internationally recognized trajectory.
- An economic offer within market parameters.
- Quality of material, equipment and service.
- Percentage of national aggregate.

If the offer includes financing:

- -Firm offer for financing with an internationally recognized lending entity.
- -Percentage of financing over the amount of investment.
- -Term of the credit.
- -Period of grace for payment of capital (at least equal to the period of time for the execution of the project).
- -Rate of interest (all in cost).





CONTRACTING MODALITIES

Projects in this Catalogue, in accordance with each sector and Government policies, may be undertaken through different contracting modalities, as follows:

- STRATEGIC ALLIANCES: Includes several associative modalities between public or mixed Ecuadorian enterprises with public or private, national or foreign companies for the development of specific projects. Included in this are alternatives such as association contracts, joint venture, creation of subsidiaries and other analogous forms. The selections of partners or allies may be done on a direct basis for national or foreign public companies; and for national or foreign private companies must be carried out through a special selection process. In any event, the associated Ecuadorian public Enterprise must have a majority participation in such association.
- **CONTRACTING WITH INTERNATIONAL PUBLIC COMPANIES:** Ecuadorian legislation permits direct contracting (commercial and for development of projects) with public or subsidiary enterprises of the International Community.
- NON-REFUNDABLE INTERNATIONAL COOPERATION: Collaboration process that supports the
 development of projects, through the transfer of technical resources and financing without
 demanding any refund, provided by entities of the International Community.
- • DIRECT INVESTMENT: Refers to those modalities in which public or private institutions, different from Ecuadorian public entities agree to develop in a direct manner, under their exclusive responsibility and risk, a specific Project. Included in this mechanism are alternatives such as concessions (electricity, mining, telecommunications), contracts for the provision of specific services (hydrocarbons), BOT, BOOT.
- BIDDING WITH FINANCING: Selection processes in which several interested parties are invited
 to present their technical and economic offers to develop a Project, additionally, accompanying the
 offer for financing, supported with a letter of intention or other analogous documents issued by
 internationally recognized financial institutions.
- **INTERNATIONAL TENDERS**: Contracting processes in which the interested parties are invited to present their technical and economic offers to develop a project financed by the Ecuadorian State.
 - Strategic Alliances
 - Contracting with international public companies
 - Non-refundable international cooperation

- Direct Investment
- Bidding with financing
- International Tenders





TECHNICAL DEFINITIONS (GLOSSARY OF TERMS)

MINING

- Prospection Studies.- Consist of the reconnaissance of the fields in extensive areas, in which the following are performed:
 - Geochemistry of sediments (taking samples in ravines and rivers).
 - Geochemistry of rocks, which is taking samples to determine the existence of minerals of economic interest.
 - Geochemistry of soils, which is carried out in places that have obtained relevant results both in the geochemistry of sediments, as in the geochemistry of rocks.
- **Geophysical Survey** (non-destructive studies that measure the electric current, magnetism or gravity of the earth's crust) this is done in sectors or areas in which the geochemical study of the soil gave positive results.
- **Exploration Studies.** These studies are performed in areas in which Prospecting Studies provided positive results when defining an area with a geologic potential for the presence of minerals of an economic interest.

Consists in performing drillings at different depths with recovery of drill cores (rock samples from within the depths of the earth).

Exploration studies may consist of various phases, which will depend on the results of each one of them. For example: initial exploration, advanced exploration, etc.





PROJECTS IN GENERAL

- **Basic Studies.** This is a simplified description of the Project, it defines the objective and the importance of the project, presents a first estimate of the activities and of the total investment that will be required, as well as annual operational costs. If the projects are aimed to income generation, it considers the annual income besides the technical viability of the solution of alternatives, rejecting the ones that are not technically feasible.
- •Pre-feasibility.- It is a study of preliminary assessment to determine the alternatives of an investment Project in terms of technical, financial, economic, environmental, social and institutional viability.
- •**Feasibility.-** It starts from the different alternatives established in the Pre-feasibility study and final viability is determined when the best alternative is chosen and upon this a study is made which includes a complete technical, financial, environmental, institutional and economic assessment. The Feasibility phase leads to the taking of a final decision to execute the project.
- •Basic Engineering.- Once the Feasibility stage has been approved and the decision to execute the Project has been taken, there is a conceptual design where the technical requirements that the projects needs are established. In this stage there is a fine-tuning of costs and an execution plan of the investment project is drafted.



FOCAL POINT ◀

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- Coordinating Ministry for Strategic Sectors
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ELECTRIC PROJECTS

Increase the coverage of electric services, assure reliability and quality of the service as well as self-sufficiency; promote the efficient and rational use of energy and develop regional energy integration, are some of the objectives that Ecuador strives to reach through the formulation and promotion of an effective policy in the electric sector and the management of Projects.







LA MERCED DE JONDACHI **HYDROELECTRIC PROJECT**



PROJECT DESCRIPTION	Hydroelectric project of 18.25 MW, which is expected to generate 121.4 GWh / year, with two Francis turbines.
CONTRACTING METHOD	 Contracting with international public enterprises Direct Investment Bidding with Financing
GOVERNING ENTITY	Ministry of Electricity and Renewable Energy
SCOPE AND LOCATION	Napo Province
TECHNICAL DATA Level of studies	Final Design and Engineering
ESTIMATED PROJECT COST	USD 38′300.000







ANGAMARCA SINDE HYDROELECTRIC PROJECT



PROJECT DESCRIPTION	Hydroelectric project of 32.10 MW with the capacity to generate 182 GWh / year, 2 vertical shaft Francis type units.
CONTRACTING METHOD	 Contracting with international public enterprises Bidding with Financing Direct Investment
GOVERNING ENTITY	Ministry of Electricity and Renewable Energy
SCOPE AND LOCATION	Cotopaxi Province
TECHNICAL DATA Level of studies	Optimization Studies
ESTIMATED PROJECT COST	USD 51′900.000







MINI HYDROELECTRIC POWER PLANT PROGRAM 2013-2017



PROJECT DESCRIPTION	National plan for mini hydroelectric-power plants, for distributed generation and improvement of voltage levels in small rural communities.
CONTRACTING METHOD	 Contracting with international public enterprises Bidding with Financing International Bidding
GOVERNING ENTITY	Ministry of Electricity and Renewable Energy
SCOPE AND LOCATION	Nationwide
TECHNICAL DATA Level of studies	Pre-feasibility
ESTIMATED PROJECT COST	USD 358 '000.000







CHIRAPI HYDROELECTRIC PROJECT



PROJECT DESCRIPTION	Hydroelectric project captures water from the Chontal Project, formed by an interconnection chamber, with an installed capacity of 169.2 MW, to generate 968.4 GWh / year.
CONTRACTING METHOD	Contracting with international public enterprisesBidding with Financing
GOVERNING ENTITY	Ministry of Electricity and Renewable Energy
SCOPE AND LOCATION	Pichincha,and Imbabura Province
TECHNICAL DATA Level of studies	Final Design and Engineering
ESTIMATED PROJECT COST	USD 362'400.000







CHONTAL HYDROELECTRIC PROJECT



PROJECT DESCRIPTION	Hydroelectric project which consists of a concrete gravity-type dam, with a height of 120 m and installed capacity of 184 MW, to generate 1034.4 GWh / year.
CONTRACTING METHOD	Contracting with international public enterprisesBidding with Financing
GOVERNING ENTITY	Ministry of Electricity and Renewable Energy
SCOPE AND LOCATION	Pichincha, and Imbabura Province
TECHNICAL DATA Level of studies	Final Design and Engineering
ESTIMATED PROJECT COST	USD 425´800.000







CARDENILLO HYDROELECTRIC PROJECT



PROJECT DESCRIPTION	The Paute-Cardenillo power plant corresponds to the fourth stage of the Paute Integrated Power complex, 575 MW.
CONTRACTING METHOD	Contracting with international public enterprisesBidding with Financing
GOVERNING ENTITY	Ministry of Electricity and Renewable Energy
SCOPE AND LOCATION	Morona Santiago Province
TECHNICAL DATA Level of studies	Basic Studies
ESTIMATED PROJECT COST	USD 900'000.000







RÍO ZAMORA HYDROELECTRIC PROJECT



System with continuous water capture, and use of the river Zamora, possible generation of 2,240 MW.
Strategic AlliancesContracting with international public enterprisesBidding with Financing
Ministry of Electricity and Renewable Energy
Morona Santiago Province
Pre-feasibility Studies
USD 3.500′000.000







RÍO SANTIAGO HYDROELECTRIC PROJECT



PROJECT DESCRIPTION	Use of the Santiago river system, possible generation of 3000-3600 MW.
CONTRACTING METHOD	Strategic AlliancesContracting with international public enterprisesBidding with Financing
GOVERNING ENTITY	Ministry of Electricity and Renewable Energy
SCOPE AND LOCATION	Morona Santiago Province
TECHNICAL DATA Level of studies	Pre-feasibility Studies
ESTIMATED PROJECT COST	USD 3.000′000.000







TUFIÑO - CHILES - CERRO NEGRO GEOTHERMAL PROJECT



PROJECT DESCRIPTION	Bi-national project with Colombia, with a potential to develop up to 114 MW.
CONTRACTING METHOD	 Strategic Alliances Contracting with international public enterprises Bidding with Financing
GOVERNING ENTITY	Ministry of Electricity and Renewable Energy
SCOPE AND LOCATION	Carchí Province and Department of Nariño
TECHNICAL DATA Level of studies	Basic Studies and Prospecting
ESTIMATED PROJECT COST	USD 150′000.000







CHACHIMBIRO GEOTHERMAL PROJECT



PROJECT DESCRIPTION	Constitutes part of the Chachimbiro volcanic complex, with a potential to develop up to 130 MW.
CONTRACTING METHOD	Strategic AlliancesContracting with international public enterprisesBidding with Financing
GOVERNING ENTITY	Ministry of Electricity and Renewable Energy
SCOPE AND LOCATION	Imbabura Province
TECHNICAL DATA Level of studies	Pre-feasibility Studies
ESTIMATED PROJECT COST	USD 162´500.000







CHALPATAN GEOTHERMAL PROJECT



PROJECT DESCRIPTION	Chalpatan is a cauldron of 5 km in diameter, located about 20 km southwest of Tulcan. Estimated potential to be determined.
CONTRACTING METHOD	 Strategic Alliances Contracting with international public enterprises Bidding with Financing
GOVERNING ENTITY	Ministry of Electricity and Renewable Energy
SCOPE AND LOCATION	Carchi Province
TECHNICAL DATA Level of studies	Basic Studies and Prospecting
ESTIMATED PROJECT COST	USD 175′000.000







CHACANA GEOTHERMAL PROJECT



PROJECT DESCRIPTION	Constitutes the central part of the Plio-Quaternary Chacana volcanic complex with a potential to produce up to 438 MW.
CONTRACTING METHOD	 Strategic Alliances Contracting with international public enterprises Bidding with Financing
GOVERNING ENTITY	Ministry of Electricity and Renewable Energy
SCOPE AND LOCATION	Napo Province
TECHNICAL DATA Level of studies	Pre-feasibility Studies
ESTIMATED PROJECT COST	USD 185´000.000







RURAL AND SUB-URBAN ELECTRIFICATION (FERUM 2013 - 2017)



PROJECT DESCRIPTION	Implement electrification projects aimed at improving the living conditions of the rural and suburban low-income areas.
CONTRACTING METHOD	Contracting with international public enterprisesBidding with Financing
GOVERNING ENTITY	Ministry of Electricity and Renewable Energy
SCOPE AND LOCATION	Nationwide
TECHNICAL DATA Level of studies	Designs in Progress
ESTIMATED PROJECT COST	USD 210′000.000







PLAN TO REDUCE ELECTRICAL ENERGY LOSSES (PLANREP 2013-2017)



PROJECT DESCRIPTION	Implementation and normalization of measuring systems, change in open networks to pre-assembled (anti-theft), implementation plan of technical and non-technical losses in distribution networks.
CONTRACTING METHOD	Contracting with international public enterprisesBidding with Financing
GOVERNING ENTITY	Ministry of Electricity and Renewable Energy
SCOPE AND LOCATION	Nationwide
TECHNICAL DATA Level of studies	Designs in Progress
ESTIMATED PROJECT COST	USD 366´240.000







NATIONAL PLAN FOR UNDERGROUND ELECTRIC LINES (2013 - 2016)



PROJECT DESCRIPTION	Implement underground electrical and telecommunications networks, to improve the urban image, reduce visual pollution, upgrade electrical and telecommunication networks, increase safety and improve the quality of customer service.
CONTRACTING METHOD	Contracting with international public enterprisesBidding with Financing
GOVERNING ENTITY	Ministry of Electricity and Renewable Energy
SCOPE AND LOCATION	Nationwide
TECHNICAL DATA Level of studies	Pre-feasibility

USD 792'500.000



ESTIMATED PROJECT COST





PLAN FOR IMPROVEMENT OF ELECTRICAL DISTRIBUTION SYSTEMS (PMD 2013-2017)



PROJECT DESCRIPTION

Implementation of projects aimed to improved the quality of electrical service, increase coverage and move forward to the reduction of technical losses in the systems of electrical distribution in the following functional stages

LS: Sub-transmission Lines CP: Primary Circuits RS: Secondary Networks AC: Service Connections IG: General Investments SE: Sub-stations TD: Distribution Transformers RD: Distribution Networks ME: Meters

CONTRACTING METHOD

- Contracting with international public enterprises
- Bidding with Financing
- International Bidding

GOVERNING ENTITY

Ministry of Electricity and Renewable Energy

SCOPE AND LOCATION

Nationwide

TECHNICAL DATA Level of studies

Designs in Progress

FINANCIAL INDICATORS Financing required

USD 1.017^{500.000}







TRANSMISSION PROGRAM 2012-2016



PROJECT	DESCRIPTION
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Projects that will improve the quality and reliability of transmission service and meet the requirements of demand growth. They are located in different parts of the country, some have regional coverage, providing direct service to one or more distribution companies.

CONTRACTING METHOD

- Contracting with international public enterprises
- Bidding with Financing

GOVERNING ENTITY

Ministry of Electricity and Renewable Energy

SCOPE AND LOCATION

Nationwide

TECHNICAL DATA

Level of studies

Feasibility

ESTIMATED PROJECT COST

USD 191'300.000





PROJECTS SUMMARY

NAME	LOCATION PROVINCE	TYPE PROJECT	AMOUNT OF INVESTMENT (USD)	ESTIMATED AMOUNT OF EQUIVALENT TON OF CO2 (MDL)
LA MERCED DE JONDACHI	Napo	Hydroelectric	38′300.000	67.510 tCo ²
ANGAMARCA SINDE	Cotopaxi	Hydroelectric	51′900.000	101.210 tCo ²
MINI HYDROELECTRIC POWER PLANT PROGRAM 2013-2017	Nationwide	Hydroelectric	358′000.000	
CHIRAPI	Imbabura y Pichincha	Hydroelectric	362´400.000	538.530 tCo ²
CHONTAL	Imbabura y Pichincha	Hydroelectric	425´800.000	575.230 tCo ²
CARDENILLO	Morona Santiago	Hydroelectric	900′000.000	1′.279.000 tCo ²
RÍO ZAMORA	Morona Santiago	Hydroelectric	3.500′000.000	4.092′900.000 tCo ²
RÍO SANTIAGO	Morona Santiago	Hydroelectric	3.000′000.000	3.900′000.000 tCo ²
TUFIÑO - CHILES CERRO NEGRO	Carchi – Nariño	Geothermic	150′000.000	254.800 tCo ²
CHACHIMBIRO	Imbabura	Geothermic	162´500.000	254.800 tCo ²
CHALPATÁN	Carchi	Geothermic	175´000.000	254.800 tCo ²
CHACANA	Napo	Geothermic	185´000.000	254.800 tCo ²





PROJECTS SUMMARY

NAME	LOCATION PROVINCE	TYPE PROJECT	AMOUNT OF INVESTMENT (USD)
FERUM 2013 - 2017	Nationwide	Distribution	210′000.000
PLANREP 2013-2017	Nationwide	Distribution	366´240.000
UNDERGROUND ELECTRIC LINES 2013 - 2016	Nationwide	Distribution	792´500.000
PMD 2013-2017	Nationwide	Distribution	1.017´500.000
TRANSMISSION PROGRAM 2012-2016	Nationwide	Transmission	191′300.000
		TOTAL	\$ 11.886'440.000







WATER PROJECTS

The promotion of these Projects strives to recover the guidance of the State, through policies, regulation, control and de-concentration management of the conservation and protection processes policies of this resource, on the basis of a proper planning of hydrographic basins.







MILAGRO FLOOD CONTROL



PROJECT DESCRIPTION	Construction of a hydraulic system for flood control in Milagro and its influence area, to protect a population of 221.095 inhabitants and 80.000 acres recovered for irrigation.
CONTRACTING METHOD	Contracting with international public enterprisesBidding with Financing
GOVERNING ENTITY	Secretariat for Water
SCOPE AND LOCATION	Guayas Province
TECHNICAL DATA Level of studies	Feasibility Study in Progress
ESTIMATED PROJECT COST	USD 160'000.000







NUEVO PEDRO CARBO TRANSFER WATER SYSTEM



DDO	IFOT	DECOL	NOITGI
PPII	11-11		

Hydraulic System Construction in order to transfer water from Daule River to Pedro Carbo River, with a flow rate of 25m³/s providing drinking water to 76.950 inhabitants and irrigation for 38.307 acres

CONTRACTING METHOD

- Contracting with international public enterprises
- Bidding with Financing

GOVERNING ENTITY

Secretariat for Water

SCOPE AND LOCATION

Guayas Province

TECHNICAL DATA

Level of studies

Pre- Feasibility Study in Progress

ESTIMATED PROJECT COST

USD 160'000.000







WATER USE AND MANAGEMENT PLAN FOR LOS RÍOS PROVINCE



PROJECT DESCRIPTION	Construction of an hydraulic system compound for 3 diversion canals to provide drinking water and irrigation in the areas of Vinces, Baba and Guayaquil benefitting 207.940 people with drinking water, and irrigating 112.897 acres
	Contracting with international public enterprisesBidding with Financing
GOVERNING ENTITY	Secretariat for Water
SCOPE AND LOCATION	Guayas and Los Ríos Provinces
TECHNICAL DATA Level of studies	Pre- Feasibility Study in Progress
ESTIMATED PROJECT COST	USD 350′000.000







MULTI- PURPOSE PROJECT FOR CHALUPAS



PROJECT DESCRIPTION

Construction of a diversion canal of 7,43 m³/s, regulating reservoirs, channels, and a distribution system which will benefit 65,000 inhabitants with drinking water and irrigation for 19.000 acres, as well as generating 60 MW of hydroelectricity.

CONTRACTING METHOD

- Contracting with international public enterprises
- Bidding with Financing

GOVERNING ENTITY

Secretariat for Water

SCOPE AND LOCATION

Cotopaxi Province

TECHNICAL DATA
Level of studies

Pre- Feasibility Study in Progress

ESTIMATED PROJECT COST

USD 280'000.000







MULTI- PURPOSE PROJECT FOR TUMBABIRO



PROJECT DESCRIPTION	Construction of a dam and system for conduction and distribution that will benefit 22.850 inhabitants with drinking water and to irrigate 8.574 acres, as well as generating 15 MW of hydroelectricity.
	Contracting with international public enterprisesBidding with Financing
GOVERNING ENTITY	Secretariat for Water
SCOPE AND LOCATION	Imbabura Province
TECHNICAL DATA Level of studies	Pre- Feasibility Study in Progress
ESTIMATED PROJECT COST	USD 186′000.000







MULTI- PURPOSE PROJECT FOR PURUHANTA- PIMAMPIRO-YAGUARCOCHA



PROJECT DESCRIPTION	Construction of an hydraulic system to provide drinking water for 18.000 inhabitants and irrigation of 6.750 acres.
CONTRACTING METHOD	 Contracting with international public enterprises Bidding with Financing
GOVERNING ENTITY	Secretariat for Water
SCOPE AND LOCATION	Imbabura and Carchi Provinces
TECHNICAL DATA Level of studies	Pre- Feasibility Study in Progress
ESTIMATED PROJECT COST	USD 77′000.000







MULTI- PURPOSE PROJECT FOR PUMA



PROJECT DESCRIPTION	Construction of a group of hydraulic projects including capture, regulation, conduction, and distribution of water, benefiting 90,000 inhabitants with drinking water and irrigation for 900 acres, in addition to generating 1 MW of hydroelectricity.
CONTRACTING METHOD	Contracting with international public enterprisesBidding with Financing
GOVERNING ENTITY	Secretariat for Water
SCOPE AND LOCATION	Cañar and Azuay Provinces
TECHNICAL DATA Level of studies	Pre- Feasibility Study in Progress
ESTIMATED PROJECT COST	USD 49′000.000







MULTI- PURPOSE PROJECT FOR JAMA



PROJECT DESCRIPTION	Construction of a dam and reservoir located on		
	the River Jama, followed by 2 diversion canals,		

the River Jama, followed by 2 diversion canals, benefitting 67.449 inhabitants with drinking water, irrigation for 6.600 acres, and generating 10 MW of hydroelectricity.

CONTRACTING METHOD

Contracting with international public enterprises

■ Bidding with Financing

GOVERNING ENTITY

Secretariat for Water

SCOPE AND LOCATION

Manabí Province

TECHNICAL DATA Level of studies

Pre- Feasibility Study in Progress

ESTIMATED PROJECT COST

USD 225'500.000







MULTI-PURPOSE RESERVOIR FOR PAMPAS DE SALASACA



PROJECT DESCRIPTION	Construction of a 5.5 million m ³ water reservoir, to ensure drinking water supply to 27.077 inhabitants and irrigation of 2.323 acres.
CONTRACTING METHOD	Contracting with international public enterprisesBidding with Financing
GOVERNING ENTITY	Secretariat for Water
SCOPE AND LOCATION	Tungurahua Province
TECHNICAL DATA Level of studies	Feasibility Study in Progress
ESTIMATED PROJECT COST	USD 61´500.000







MULTI-PURPOSE PROJECT FOR COAQUE



PROJECT DESCRIPTION	Construction of a dam and reservoir on the Coaque River, followed by a conduction system, benefiting 60.641 people with drinking water and irrigation to 2.284 acres.
CONTRACTING METHOD	Contracting with international public enterprisesBidding with Financing
GOVERNING ENTITY	Secretariat for Water
SCOPE AND LOCATION	Manabí Province
TECHNICAL DATA Level of studies	Pre- Feasibility Study in Progress
ESTIMATED PROJECT COST	USD 98′500.000







INTERVENTION, EXPANSION, **AND CONSTRUCTION PLAN** FOR AN HYDRAULIC AQUEDUCT **FOR SANTA ELENA**



PROJECT DESCRIPTION	Involves expanding the current infrastructure of the Daule-Santa Elena transfer system from 4,6 m ³ /s to 27,6 m ³ /s, to meet the new demands for drinking water purposes and irrigation of 42.000 acres of the entire Santa Elena peninsula.
CONTRACTING METHOD	Contracting with international public enterprisesBidding with Financing
GOVERNING ENTITY	Secretariat for Water
SCOPE AND LOCATION	Guayas and Santa Elena Provinces
TECHNICAL DATA Level of studies	Basic studies

USD 248'000.000



ESTIMATED PROJECT COST





REPOTENTIATION OF TAHUIN MULTI-PURPOSE PROJECT CURRENTLY IN OPERATION



PROJECT DESCRIPTION

Involves optimization and/or upgrade of existing infrastructure of the Tahuin project for flood control, drinking water supply and irrigation (8.000 acres or more) and generation of 3,5MW of hydroelectricity.

CONTRACTING METHOD

- Contracting with international public enterprises
- Bidding with Financing

GOVERNING ENTITY

Secretariat for Water

SCOPE AND LOCATION

El Oro Province

TECHNICAL DATA
Level of studies

Basic Engineering

ESTIMATED PROJECT COST

USD 48'700.000







MULTI-PURPOSE PROJECT FOR LEIVISA



PROJECT DESCRIPTION	Construction of an hydraulic system to supply drinking water for 31.000 inhabitants and irrigation for 5.600 acres
CONTRACTING METHOD	Contracting with international public enterprisesBidding with Financing
GOVERNING ENTITY	Secretariat for Water
SCOPE AND LOCATION	Cotopaxi and Tungurahua Provinces
TECHNICAL DATA Level of studies	Basic studies
ESTIMATED PROJECT COST	USD 43´000.000







MULTI-PURPOSE PROJECT LANGOA II



PROJECT DESCRIPTION	Construction of an hydraulic system for drinking water supply, irrigation for 2.400 acres and hydroelectrical generation.
CONTRACTING METHOD	■ Bidding with Financing
GOVERNING ENTITY	Secretariat for Water
SCOPE AND LOCATION	Napo and Cotopaxi Provinces
TECHNICAL DATA Level of studies	Basic studies
ESTIMATED PROJECT COST	USD 38′600.000





PROJECTS SUMMARY

NAME	LOCATION PROVINCE	DESCRIPTION	ESTIMATED COST PROJECT (USD)
MILAGRO FLOOD CONTROL	Guayas	Hydrographic Demarcation of Guayas	160′000.000
NUEVO PEDRO CARBO TRANSFER WATER SYSTEM	Guayas	Hydrographic Demarcation of Guayas	160′000.000
WATER USE AND MANAGEMENT PLAN FOR LOS RÍOS PROVINCE	Guayas y Los Ríos	Hydrographic Demarcation of Guayas	350′000.000
MULTI- PURPOSE PROJECT FOR CHALUPAS	Cotopaxi	Hydrographic Demarcation of Pastaza	280′000.000
MULTI- PURPOSE PROJECT FOR TUMBABIRO	Imbabura	Hydrographic Demarcation of Mira	186′000.000
MULTI- PURPOSE PROJECT FOR PURUHANTA – PIMAMPIRO –YAGUARCOCHA	Imbabura y Carchi	Hydrographic Demarcation of Mira	77′000.000
MULTI- PURPOSE PROJECT FOR PUMA	Cañar y Azuay	Hydrographic Demarcation of Santiago	49′000.000
MULTI- PURPOSE PROJECT FOR JAMA	Manabí	Hydrographic Demarcation of Manabí	225′500.000
EMBALSE PARA USO MULTIPROPÓSITO PAMPAS DE SALASACA	Tungurahua	Hydrographic Demarcation of Pastaza	61′500.000





PROJECTS SUMMARY

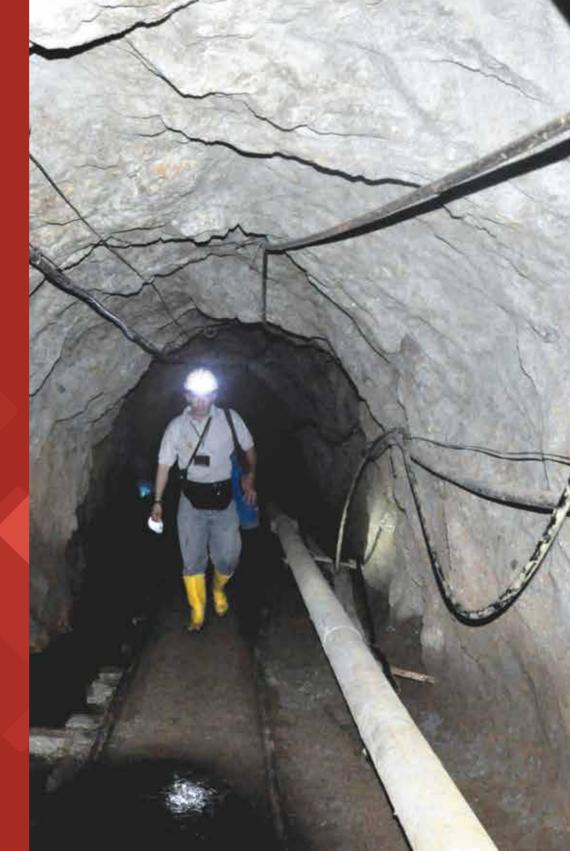
NAME	LOCATION PROVINCE	DESCRIPTION	ESTIMATED COST PROJECT (USD)
MULTI-PURPOSE PROJECT FOR COAQUE	Manabí	Hydrographic Demarcation of Manabí	98′500.000
INTERVENTION, EXPANSION, AND CONSTRUCTION PLAN FOR AN HYDRAULIC AQUEDUCT FOR SANTA ELENA	Guayas y Santa Elena	Hydrographic Demarcation of Guayas	248′000.000
REPOTENTIATION OF TAHUIN MULTI-PURPOSE PROJECT CURRENTLY IN OPERATION	El Oro	Hydrographic Demarcation of Jubones	48′700.000
MULTI-PURPOSE PROJECT FOR LEIVISA	Cotopaxi y Tungurahua	Hydrographic Demarcation of Pastaza	43′000.000
MULTI-PURPOSE PROJECT LANGOA II	Napo y Cotopaxi	Hydrographic Demarcation of Pastaza y Napo	38′600.000
		TOTAL	2.025′800.000





MINING PROJECTS

Ecuador is a country that has a great potential for growth in the exploration and development of deposits and minerals. The objective of this sector is to sustainable generate development with public policies that facilitate, regulate investments promote extractive activities for Ecuador. The mining sector represents an important source of resources for the development of the nation, as a leveraging factor for the generation of employment, and a factor for a balanced local and regional development.





NANGUIPA MOUNTAIN RANGE MINING PROJECT



PROJECT DESCRIPTION

Project in the Nambija mining district, it presents 2 anomalies: Cerro Colorado and Tumi, with a potential of 600 million tons of materials with minerals such as gold, copper and molybdenum.

CONTRACTING METHOD

Strategic alliances

GOVERNING ENTITY

National Mining Company (Enami E.P.)

SCOPE AND LOCATION

Zamora Chinchipe Province

TECHNICAL DATA Level of studies

Prospection studies

FINANCIAL INDICATORS Financing required

USD 19'200.000







TOLA NORTE MINING PROJECT



PROJECT DESCRIPTION

Exploration and exploitation of any ferrous sands. Estimated existence of approximately 1,000,000 tons of mineral, with 87% iron, which represents USD\$ 177.26 per ton.

CONTRACTING METHOD

Strategic alliances

GOVERNING ENTITY

National Mining Company (Enami E.P.)

SCOPE AND LOCATION

Esmeraldas Province

TECHNICAL DATA Level of studies

Initial exploration studies

FINANCIAL INDICATORS Financing required

USD 3'300.000







TELIMBELA MINING PROJECT



PROJECT DESCRIPTION

Initial studies done by the Ecuadorian and Japan governments; copper/molybdenum type mineral deposits found; estimated potential 250 million tons with 0.5% Cu.

CONTRACTING METHOD

Strategic alliances

GOVERNING ENTITY

National Mining Company (Enami E.P.)

SCOPE AND LOCATION

Bolívar Province

TECHNICAL DATA
Level of studies

Initial exploration studies

FINANCIAL INDICATORS Financing required

USD 14'000.000







EL TORNEADO MINING PROJECT



PROJECT DESCRIPTION	Prospection and exploration of copper, molybdenum, and gold in the El Torneado mining concession.
CONTRACTING METHOD	■ Strategic alliances
GOVERNING ENTITY	National Mining Company (Enami E.P.)
SCOPE AND LOCATION	Bolívar and Los Ríos Province
TECHNICAL DATA Level of studies	Prospection and initial exploration studies
FINANCIAL INDICATORS Financing required	USD 19'000.000







PACTO MINING PROYECT



PROJECT DESCRIPTION

Develop investigation, prospection and exploration stages, to determine the potential and mineral resources in the "PACTO" project concessions (minerals copper/molybdenum)

CONTRACTING METHOD

Strategic alliances

GOVERNING ENTITY

National Mining Company (Enami E.P.)

SCOPE AND LOCATION

Pichincha Province

TECHNICAL DATA

Level of studies Prospection studies

FINANCIAL INDICATORS

Financing required USD 5'000.000







LA BONITA MINING PROJECT



PROJECT DESCRIPTION

Development of investigation, prospection and exploration stages, to determine the potential and the mineral resources in "La Bonita" project concessions (minerals copper / gold).

CONTRACTING METHOD

Strategic alliances

GOVERNING ENTITY

National Mining Company (Enami E.P.)

SCOPE AND LOCATION

Sucumbios Province

TECHNICAL DATA
Level of studies

Prospection studies

FINANCIAL INDICATORS Financing required

USD 14'500.000





PROJECTS SUMMARY

NAME	LOCATION PROVINCE	DEPOSIT	AMOUNT OF FINANCING (USD)
NANGUIPA MOUNTAIN RANGE MINING PROJECT	Zamora Chinchipe	Gold, Copper and Molybdenum	19´200.000
TOLA NORTE MINING PROJECT	Esmeraldas	Arenas ferruginous	3′300.000
TELIMBELA MINING PROJECT	Bolívar	Cobare, Molybdenum	14′000.000
EL TORNEADO MINING PROJECT	Bolívar y Los Ríos	Gold, Copper and Molybdenum	19′000.000
PACTO MINING PROYECT	Pichincha	Copper, Molybdenum	5′000.000
LA BONITA MINING PROJECT	Sucumbíos	Copper, Gold	14´500.000
		TOTAL	\$75'000.000





OIL PROJECTS

Ecuador strives to efficiently exploit its energy resources by promoting the exploration of new oil and gas fields, as well as investment in the refining of crudes, with the objective of guaranteeing autonomy in the consumption of derivatives.









REFINERIA DEL PACÍFICO -MONTEVERDE - LA LIBERTAD MULTI PURPOSE PIPELINE



DDO I	FOT	DESCRIPTION
LUUJ		DESCRIPTION

Construction of a 175 km multipurpose pipeline from Refinería del Pacífico in the province of Manabí to Monteverde and La Libertad in the province of Santa Elena, transporting hydrocarbon derivatives, which will be used initially to satisfy the domestic market and then export any surplus.

CONTRACTING METHOD

- Contracting with international public enterprises
- Bidding with Financing
- International Bidding

GOVERNING ENTITY

EP Petroecuador

SCOPE AND LOCATION

Manabí and Santa Elena Provinces

TECHNICAL DATA Level of studies

Basic Studies

REQUIRED INVESTMENT

USD 250'000.000







ELECTRICITY OPTIMIZATION GENERATION PROJECT



PROJECT DESCRIPTION	Additional generating capacity of 41.10 MW, and 502.5 km of distribution facilities, in the Eastern Region
CONTRACTING METHOD	Strategic alliances
	Contracting with international public enterprisesBidding with Financing
GOVERNING ENTITY	Petroamazonas EP
SCOPE AND LOCATION	Eastern Region
TECHNICAL DATA Level of studies	Basic Engineering
REQUIRED INVESTMENT	USD 687′000.000







EXPLORATION AND EXPLOITATION OF BLOCK 20, AND DEVELOPMENT OF THE PUNGARAYACU FIELD



PROJECT DESCRIPTION	Development of heavy crude at the Pungarayacu field, approximately 1.000 MMbls in reserves.
CONTRACTING METHOD	Strategic alliancesDirect Investment
GOVERNING ENTITY	Petroamazonas EP
SCOPE AND LOCATION	Napo Province
TECHNICAL DATA Level of studies	Feasibility
REQUIRED INVESTMENT	USD 6.175´000.000







EXPLORATION OF BLOCK 6 (NATURAL GAS 2014 - 2015)



PROJECT DESCRIPTION	Includes perforation of 2 exploratory and 2 development wells, acquisition and processing of seismic 3D.
CONTRACTING METHOD	Strategic alliancesContracting with international public enterprisesBidding with Financing
GOVERNING ENTITY	Petroamazonas EP
SCOPE AND LOCATION	Santa Elena Province
TECHNICAL DATA Level of studies	Basic Engineering
REQUIRED INVESTMENT	USD 360 '000.000







SOUTH EAST REGION EXPLORATION: BLOCK 86-78



PROJECT DESCRIPTION	The initial scope will be an exploratory phase for this Blocks; furthermore, a Development Plan to the Hydrocarbons Secretariat of Ecuador (SHE) will be presented.
CONTRACTING METHOD	Strategic alliancesDirect Investment
GOVERNING ENTITY	Petroamazonas EP
SCOPE AND LOCATION	Morona Santiago Province
TECHNICAL DATA Level of studies	Pre-Feasibility
REQUIRED INVESTMENT	USD 198´000.000







QUININDE - REFINERIA DEL PACÍFICO OIL PIPELINE



PROJECT DESCRIPTION

Construction of a 220km oil pipeline, to transport Ecuadorian crude from Quininde in the province of Esmeraldas to the Refinería del Pacífico, located in the province of Manabí.

CONTRACTING METHOD

Contracting with international public enterprises

■ Bidding with Financing

■ International Bidding

GOVERNING ENTITY

Petroamazonas EP

SCOPE AND LOCATION

Esmeraldas and Manabí Provinces

TECHNICAL DATA

Level of studies

Preliminary Studies

REQUIRED INVESTMENT

USD 350'000.000







OPTIMIZATION OF PRODUCTION (OPT), SECONDARY RECOVERY (IOR) AND IMPROVED RECOVERY (EOR) PROJECTS



PROJECT DESCRIPTION	Implement projects for optimization of production, secondary recovery, and improved recovery of petroleum.
CONTRACTING METHOD	 Strategic alliances Contracting with international public enterprises Bidding with Financing
GOVERNING ENTITY	Petroamazonas EP
SCOPE AND LOCATION	Eastern Region
TECHNICAL DATA Level of studies	Fields under Exploitation
REQUIRED INVESTMENT	USD 1.080´000.000





OPTIMIZATION OF PRODUCTION (OPT), SECONDARY RECOVERY (IOR) AND IMPROVED RECOVERY (EOR) PROJECTS

ВLОСК	FIELD	RESERVES MMbls	PRODUCTION Bls/day
12	EDEN YUTURI	62,5	33.700
56	LAGO AGRIO	56,8	4.500
18	PALO AZUL	26,3	14.000
15	PAÑACOCHA	23,7	9.000
44	PUCUNA	19,3	2.500
15	YANAQUINCHA ESTE	14.1	7.600
15	INDILLANA	12,6	3.340
15	LIMONCOCHA	11,5	10.500
58	VICTOR H. RUALES	11	7.100
58	TIPISHCA-HUAICO	8,8	7.100
50	CHARAPA	5,5	0
57	ARAZA	3,5	11
12	TUMALI SURESTE	3	1000
1	PACOA (Prov. Santa Elena)	2	60
18	PATA	1,8	1.300
56-57	CHANANGUE	0,6	0
	TOTAL	263	95.611



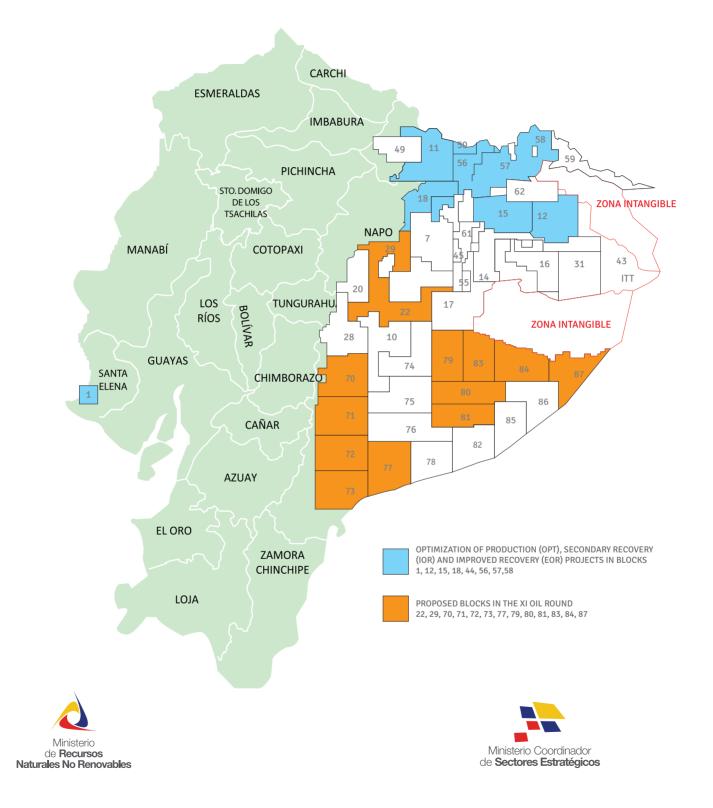


PROPOSED BLOCKS IN THE XI OIL ROUND

BLOCK FOR EXPLORATION (XI OIL ROUND)	LOCATION	AREA	TOTAL EXPLORATION INVESTMENT (USD)
BLOCK 22	NAPO - PASTAZA	1.753,5 km²	68´294.000
BLOCK 29	NAPO - ORELLANA	1.684,9 km²	68´294.500
BLOCK 70	MORONA SANTIAGO - PASTAZA	1.800,7 km²	23´073.500
BLOCK 71	MORONA SANTIAGO	1.854,3 km²	16´073.750
BLOCK 72	MORONA SANTIAGO	1.875,6 km²	16´091.750
BLOCK 73	MORONA SANTIAGO	1.979,6 km²	16´058.000
BLOCK 77	MORONA SANTIAGO	1.992,4 km²	101´820.500
BLOCK 79	PASTAZA	1.580,6 km²	62´029.750
BLOCK 80	PASTAZA	1.556,6 km²	62´056.000
BLOCK 81	PASTAZA	1.305,3 km²	68′304.750
BLOCK 83	PASTAZA	1.469,3 km²	67´019.750
BLOCK 84	PASTAZA	1.701,3 km²	62´000.000
BLOCK 87	PASTAZA	1.534,5 km²	68´250.000







PROJECTS SUMMARY

NAME	LOCATION PROVINCE	TYPE PROJECT	AMOUNT OF INVESTMENT (USD)
REFINERIA DEL PACÍFICO - MONTEVERDE - LA LIBERTAD MULTI PURPOSE PIPELINE	Manabí Santa Elena	Transport hydrocarbon derivatives	250′000.000
ELECTRICITY OPTIMIZATION GENERATION PROJECT	Eastern Region	Generation and distribution Power in the Eastern Region	687´000.000
EXPLORATION AND EXPLOITATION OF BLOCK 20, AND DEVELOPMENT OF THE PUNGARAYACU FIELD	Napo	Exploration of oil	6.175′000.000
EXPLORATION OF BLOCK 06 NATURAL GAS (2014 -2015)	Santa Elena	Natural Gas Exploration	360′000.000
SOUTH EAST REGION EXPLORATION: BLOCK 86-78	Pastaza	Oil exploration	198′000.000
QUININDE - REFINERIA DEL PACÍFICO OIL PIPELINE	Esmeraldas y Manabí	Transportation of oil	350′000.000
OPTIMIZATION OF PRODUCTION (OPT), SECONDARY RECOVERY (IOR) AND IMPROVED RECOVERY (EOR) PROJECTS	Eastern Region	Oil recovery in mature fields	1.080′000.000
PROPOSED BLOCKS IN THE XI OIL ROUND	Morona Santiago, Napo, Orellana y Pastaza.	Oil Exploration	700′000.000
		TOTAL	\$ 9.800 '000.000





TELECOMMUNICATIONS PROJECTS

By means of the creation of the Ministry of Telecommunications and of the Society of Information, on August 13, 2009, the State recognized need guaranteeing to all Ecuadorians equal Access to the Technologies of Information and Communication, taking over the responsibility of assuring the creation of a solid base for the transition of our country towards the society of information.









ICT LABORATORIES AND CONNECTIVITY IN PUBLIC EDUCATION INSTITUTIONS, AT NATIONAL LEVEL



PROJECT DESCRIPTION	Implementation of 8,000 ICT laboratories with connectivity, in public education institutions at the national level, facilitating access for rural and urban sectors that have had minimal access to information technologies. There is currently about 10% coverage.
CONTRACTING METHOD	 Strategic alliances Contracting with international public enterprises Bidding with Financing
GOVERNING ENTITY	Ministry of Telecommunication and Information Society
SCOPE AND LOCATION	Nationwide
TECHNICAL DATA Level of studies	Feasibility Study
COST OF PROYECT	USD 253′000.000





PROJECTS SUMMARY

NAME	LOCATION PROVINCE	DESCRIPTION	LEVEL OF STUDIES	AMOUNT OF INVESTMENT (USD)
ICT LABORATORIES AND CONNECTIVITY IN PUBLIC EDUCATION INSTITUTIONS, AT NATIONAL LEVEL	Ecuador	Implementation of 8,000 ICT laboratories with connectivity, in public education institutions at the national level	Feasibility Study	253′000.000
			TOTAL	\$ 253 '000.000







ENVIRONMENT PROJECTS

To ensure the conservation of biodiversity and the welfare of all living beings, exercising stewardship in a framework of respect and social-environmental responsibility, are some of the objectives that Ecuador strives to reach through the formulation and promotion of an effective policy in the environmental sector and the management of Projects.







NATIONAL REFORESTATION PROGRAM FOR ENVIRONMENTAL CONSERVATION, WATER BASIN PROTECTION, AND ALTERNATIVE BENEFITS



PROJECT DESCRIPTION

Contribute to environmental quality improvement in the country through reforestation, for the purpose of conservation, protection of water basins, and alternative benefits.

CONTRACTING METHOD

Strategic alliances

Nonrefundable Cooperation

GOVERNING ENTITY

Ministry of Environment

SCOPE AND LOCATION

Nationwide

TECHNICAL DATA

Level of studies

In progress

FINANCIAL INDICATORS

Financing required

USD 81'600.000







INTEGRAL NATIONAL PROGRAM OF SOLID WASTE MANAGEMENT



PROJECT DESCRIPTION

Establish processes for integrated and sustainable management of solid waste through the local governments, in order to promote recycling and waste-to-energy in the country.

CONTRACTING METHOD

Strategic alliances

■ Nonrefundable Cooperation

GOVERNING ENTITY

Ministry of Environment

SCOPE AND LOCATION

Nationwide

TECHNICAL DATA
Level of studies

In progress

FINANCIAL INDICATORS Financing required

USD 57'000.000







FOREST CONSERVATION PROGRAM



PROJECT DESCRIPTION

Conservation of the vegetation cover and its biodiversity by generating direct incentives to the rural populations living in the first to second quintiles of poverty.

CONTRACTING METHOD

Strategic alliances

■ Nonrefundable Cooperation

GOVERNING ENTITY

Ministry of Environment

SCOPE AND LOCATION

Nationwide

TECHNICAL DATA

Level of studies

In progress

FINANCIAL INDICATORS

Financing required

USD 98'900.000







STRENGTHENING THE RESILIENCE TO THE ADVERSE EFFECTS OF CLIMATE CHANGE



PROJECT DESCRIPTION	adverse effects of climate change, with a focus on communities and ecosystem.
CONTRACTING METHOD	Strategic alliances Nonrefundable Cooperation
GOVERNING ENTITY	Ministry of Environment
SCOPE AND LOCATION	Nationwide
TECHNICAL DATA Level of studies	In progress
FINANCIAL INDICATORS Financing required	USD 7′500.000







INTEGRATED MANAGEMENT TO COUNTERACT DESERTIFICATION, SOIL DEGRATION AND TO PROMOTE CLIMATE CHANGE ADAPTATION.



DRO	IFCT	DFSCR	IDTION
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Implement local initiatives of conservation and development with a focus on gender equity and multiculturality.

CONTRACTING METHOD

- Strategic alliances
- Nonrefundable Cooperation

GOVERNING ENTITY

Ministry of Environment

SCOPE AND LOCATION

Nationwide

TECHNICAL DATA

Level of studies

In progress

FINANCIAL INDICATORS

Financing required

USD 6'500.000





PROJECTS SUMMARY

NAME	LOCATION PROVINCE	DESCRIPTION	COOPERATION REQUIRED (USD)
NATIONAL REFORESTATION PROGRAM FOR ENVIRONMENTAL CONSERVATION, WATER BASIN PROTECTION, AND ALTERNATIVE BENEFITS	Nationwide	Contribute to the improvement environmental quality country through reforestation.	81′600.000
INTEGRAL NATIONAL PROGRAM OF SOLID WASTE MANAGEMENT	Nationwide	Establish processes for integrated and sustainable management solid waste.	57′000.000
FOREST CONSERVATION PROGRAM	Nationwide	Save coverage vegetation and biodiversity.	98′900.000
STRENGTHENING OF THE RESILIENCE FACING THE EFFECTS OF CLIMATE CHANGE	Nationwide	Increase knowledge to manage risk affecting the food and nutrition security	7′500.000
INTEGRATED MANAGEMENT TO COMBAT DESERTIFICATION, SALL DEGRATION AND ADAPTATION TO CLIMATE CHANGE	Nationwide	Promote protection and conservation of natural resourse processes by providing viable alternatives	6′500.000
		TOTAL	251′500.000





BASIC INDUSTRIES PROJECTS

Integrated industries that transform raw materials in to intermediate products, in Ecuador these materials are developed from hydrocarbon sectors (oil and gas), mining (metallic and non-metallic) and forest resources.





IMPORTANCE

Basic industries act as a lever for development in the productive chain with added value contributing to the change in the production matrix of the country. The main social-economic challenges are focused on reducing poverty, improving the human development index, increasing GDP per capita, with an industrial model based on fixed investment capital which encourages investment, increases and better distributes income, improves the qualification and quality of the labor market, generates direct growth in the manufacturing industry, accelerates economy growth and improves the import and export mix.

For the state it is essential to implement basic industries with a systemic vision that drives disaggregation and technology transfer. In order to accomplish this goal, it is developing an Integral Strategic Plan that will identify opportunities in the porcess of changing the productive matrix whitin the scope of Strategic Sectors. In this catalog we have included studies at a basic profile level.







UREA PLANT

PROJECT DESCRIPTION	Implementation of a urea plant with natural gas with a capacity of 750,000 tons per year	
CONTRACTING METHOD	Strategic AlliancesDirect InvestmentBidding with financing	
GOVERNING ENTITY	Basic Industries Unit	
TECHNICAL DATA Level of studies	Basic Profile	
ESTIMATED PROJECT COST	USD 850 '000.000	





STEEL PLANT

PROJECT DESCRIPTION	Implementation of steel plant to supply raw materials to the industrial sector with a capacity of 1.4 MM tons per year	
CONTRACTING METHOD	Strategic AlliancesDirect Investment	
GOVERNING ENTITY	Basic Industries Unit	
TECHNICAL DATA Level of studies	Basic Profile	
ESTIMATED PROJECT COST	USD 1.500′000.000	





SHIPYARD

PROJECT DESCRIPTION	Construction and repair services for maritime transport vessels
CONTRACTING METHOD	Strategic AlliancesBidding with financing
GOVERNING ENTITY	Basic Industries Unit
TECHNICAL DATA Level of studies	Basic Profile
ESTIMATED PROJECT COST	USD 460´000.000





COPPER REFINERY

PROJECT DESCRIPTION	Implementation of a plant to produce copper cathodes with capacity of 600,000 tons per year	
CONTRACTING METHOD	Strategic AlliancesDirect Investment	
GOVERNING ENTITY	Basic Industries Unit	
TECHNICAL DATA Level of studies	Basic Profile	
ESTIMATED PROJECT COST	USD 700′000.000	



PROJECT SUMMARY

PROJECT NAME	DESCRIPTION	REQUIRED COOPERATION (USD)
UREA PLANT	Implementation of a urea plant with natural gas with a capacity of 750,000 tons per year	850′000.000
STEEL PLANT	Implementation of steel plant to supply raw materials to the industrial sector with a capacity of 1.4 MM tons per Year	1.500′000.000
SHIPYARD	Construction and repair services for maritime transport vessels	460´000.000
COPPER REFINERY	Implementation of a plant to produce copper cathodes with capacity of 600,000 tons per year	700′000.000
	TOTAL	3.510′000.000



PETROCHEMICAL PLANTS



PETROCHEMICAL PLANT EARLY STAGE

PLANT	DESCRIPTION	CAPACITY (Thousands of Tons per year)	MODE RECRUITMENT
Linear Alkyl Benzene	Petrochemical Plant from basic products of the Refinería del Pacífico EP, for production of Linear Alkyl Benzene.		Direct Investment Strategic Alliances
Phthalic Anhydride	Petrochemical Plant from basic products of the Refinería del Pacífico EP, for production of Phthalic Anhydride	30	Direct Investment Strategic Alliances
Terephthalic Acid	Petrochemical Plant from basic products of the Refinería del Pacífico EP, for production of terephthalic acid	225	Direct Investment Strategic Alliances













