



PERÚ

Ministerio
de Energía y Minas

IEEJ: May 2009

Diversification of the Energetic Matrix

Peru: An Open Economy forehead to the world

Ministry of Energy and Mines

Peru

Jennie Vizcarra Alvizuri

Director of the Normative Hydrocarbons Bureau

Energy Policy

- Diversify the power matrix to assure the demand of energy by fostering the competitiveness of our country in a globalized world and by guaranteeing its sustainable development.
- Promote the private investment in the power sector with clear and stable rules.
- Promote and execute works of energy in the countryside and isolated parts of the country to extend the demand, give more opportunities, and improve the quality of life of the population.
- Promote the efficient use of the energy.
- Promote regional power integration.

Policy about the Hydrocarbons Sector

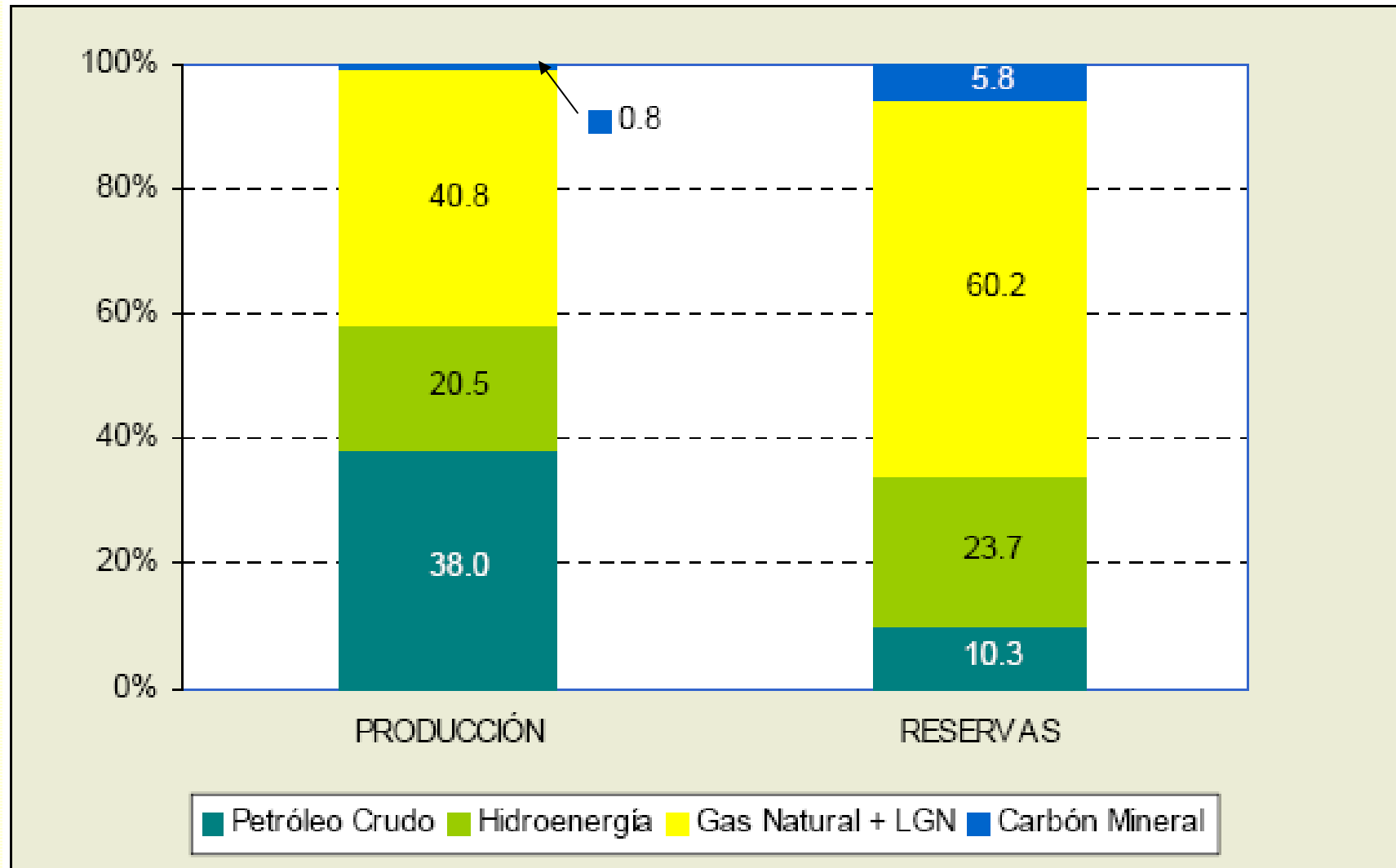
- Assure the rational supplying of fuels to competitive prices
- Promote the hydrocarbons exploration in order to increase the reserves by means of a legal framework that causes the increase of the production of oil and gas.
- Promote the efficient use of the natural gas in the industry, electrical generation, homes and in the transport.
- Promote a fast growth of the networks of natural gas distribution in Lima and other regions of the country. Also, to promote the development of virtual ductos (LNG, CNG) to supply zones that do not have natural gas networks.
- Promote the installation of petrochemical plants.
- Improve the quality of fuels by improving the refineries of the country
- Promote the use of the biofuels by taking care of the ecosystem and without affecting the nourishing chain.

Policy about Electricity Sector

- Promote the investment in generation, transmission and distribution of electrical energy for the opportune and efficient cover of the demand.
- Promote the development and use of the renewable power plants for the electricity generation.
- Continue the extension of the electrical cover by means of the work execution in the countryside, isolated and border of the country.
- Foster the productive use of the electricity in order to increase the levels of income of the population of the rural areas, by giving sustainability to the service of electrical energy, to turn it into an important factor in the fight against poverty.
- Promote the efficient use of the electrical energy.
- Promote the investments in generation and transmission of electrical energy for regional power integration. Peru can be exporter of electricity in the Region, by, considering its hydroenergetic potential.
- Improve the normative and regulatory framework of the Sector.

Energetic Matrix

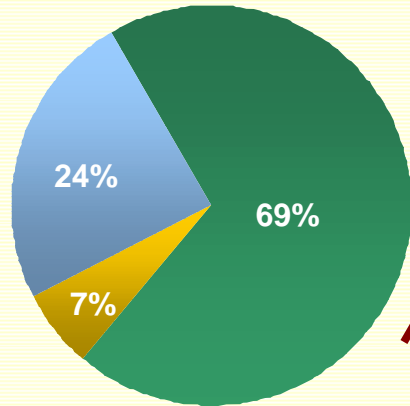
Production and Proven Reserves of Commercial Energy



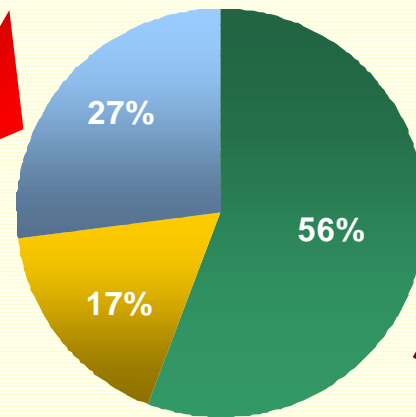
Source: Ministry of Energy and Mines, National Energy Balance 2007

Energetic Matrix Change

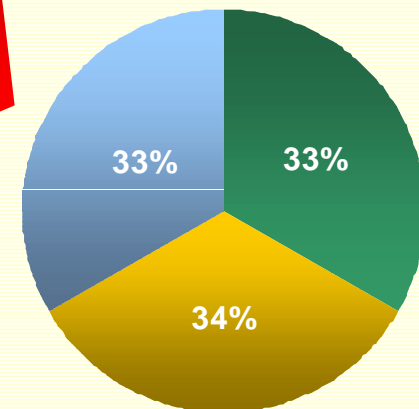
Before Camisea



Currently



Goal



- Oil
- Natural Gas + NGL
- Renewable Energy

- Hydro Energy
- Bio fuels
- Non Conventional Energy

Hydrocarbons

In Peru, the hydrocarbon activities are developed within a legal framework that promotes the free company and guarantees the equal treatment to the national and foreign investors.

Law N° 26221

The Organic Law for Hydrocarbons establishes that local or foreign individuals or corporations can carry out hydrocarbon activities throughout the national territory.

Exploration y explotación (Art. 13°), transportation via pipelines (Art. 72°), refining and processing of hydrocarbons (Art. 74°), hydrocarbons imports (Art. 75°).

Law N° 26221

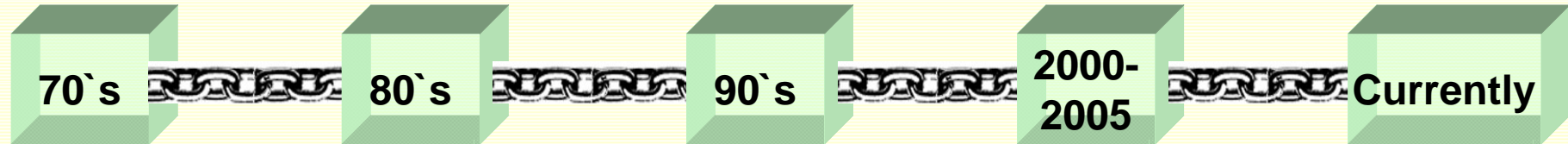
The Organic Law for Hydrocarbons establishes Free Trade:

“Article 77°.-The activities and prices related to crude oil and by-products are ruled by supply and demand.”

State Policy and Results to the Date

- Most of the hydrocarbon operations are of long time and they are subjected to different levels of risk that go from the high exploratory risk to the smaller risk of the retail commercial activities.
- Specially for the activities of high risk and greater period of time, it is important that its development has juridical stability.
- Peru, by means of the Organic Law for Hydrocarbons, has established a STATE POLICY that has been currently in force since 1993, and it has given the following results:

Investments in the Hydrocarbon Chain



Great investments in Exploration / Production

Discovery of oil in the Jungle
Signature of great number of contracts

Great Investments in Hydrocarbons Transportation and Processing

North-Peruvian Crude oil Pipeline
Iquitos Refinery
FCC Construction – Talara Refinery
Petrochemical Plants Fertilizers, Solvents, and carbon black

Great Investments in Hydrocarbons Commercialization

Modernization of Fueling and Service Station
Natural Gas Processing Plant in Aguaytia
Total Privatization of upstream and partial privatization of downstream
Modernization of Pampilla Refinery by Repsol

Great Investments in Natural Gas

Development of Block 88
Gas-Liquids Separation Plant in Malvinas
NGL Fractionating Plant in Pisco
Natural Gas and Liquids Transportation System
Natural Gas Distribution System in Lima and Callao

Great Investments: Exploration/Production

Contracts Record
Heavy oil Exploitation
Processing Plants
Modernization of Refineries
Malvinas and Pisco revamping
Petrochemistry
Ammonia –urea-nitrate

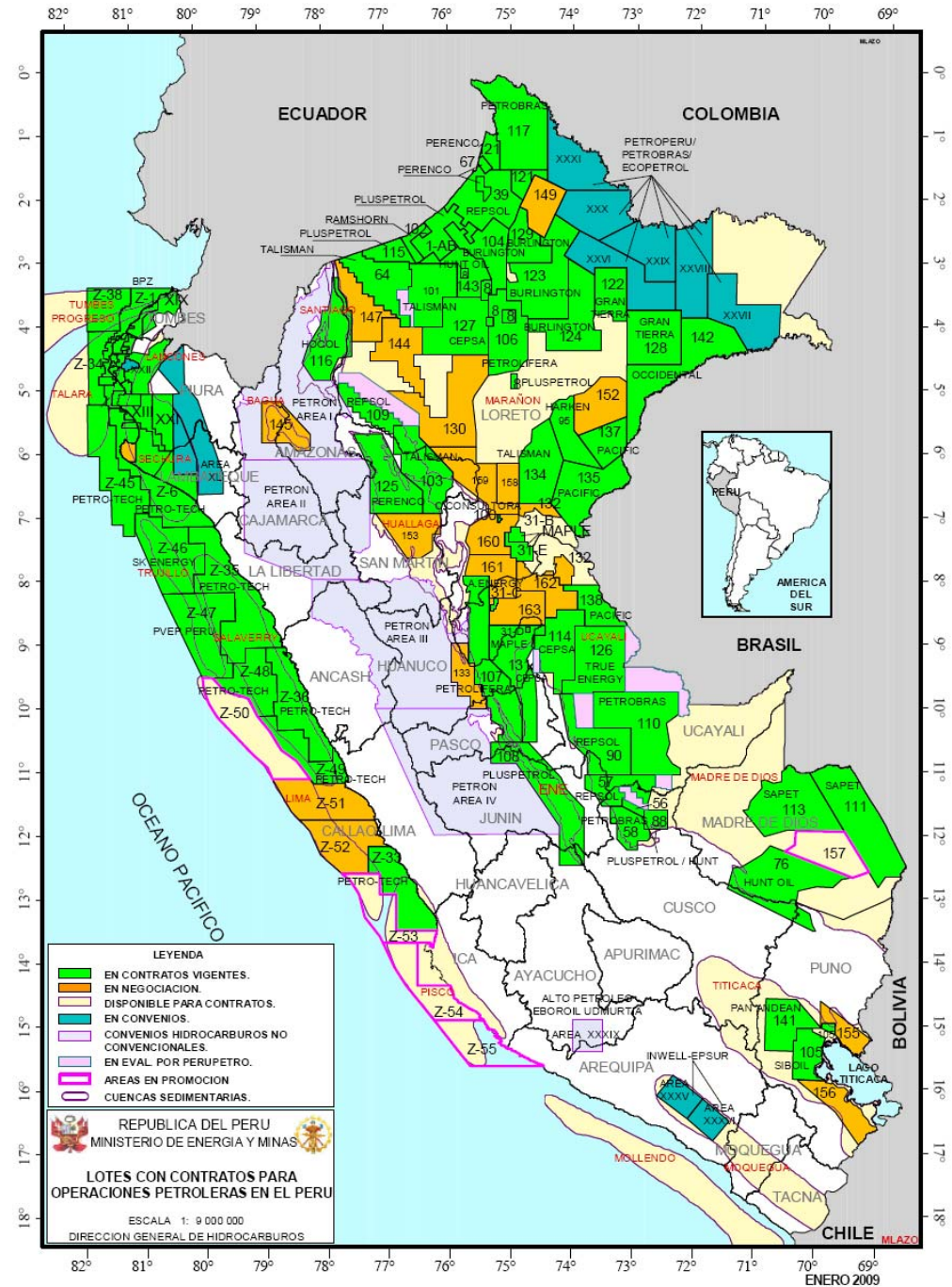
Natural Gas

Micro liquefaction
GNC
Regional Pipelines
Commercialization
LPG
VNG (Intelligent Chip)
Biofuels

Petroleum Contracts

CONTRATOS PETROLEROS SUSCRITOS

AÑO	EXPLORACIÓN	EXPLORACIÓN	TOTAL
2001	15	14	29
2002	16	13	29
2003	16	11	27
2004	17	14	31
2005	17	28	45
2006	18	43	61
2007	19	65	84
2008	19	61	80



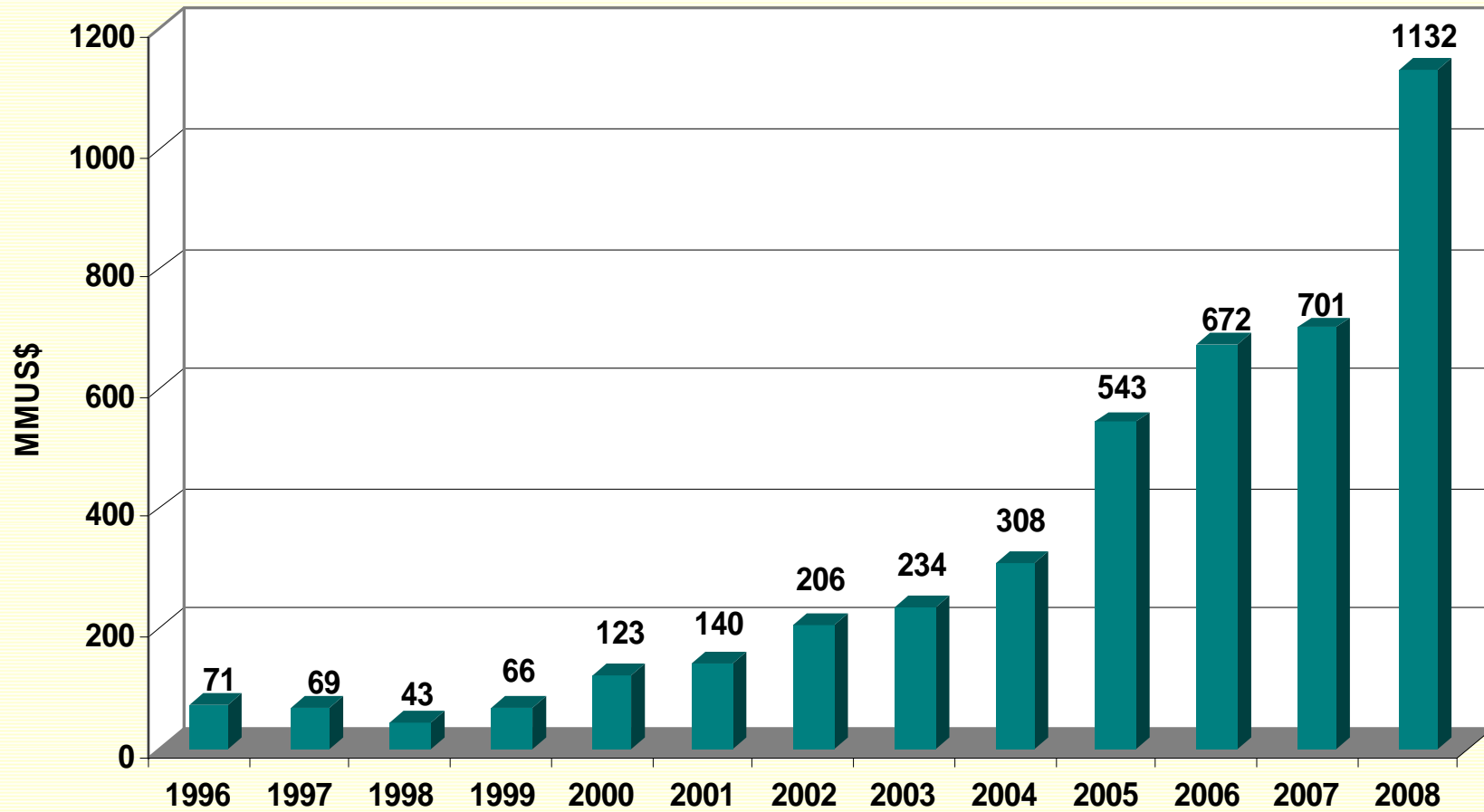


The Latest Discoveries and Confirmations

- Block 67 – Perenco
- Block 39 – Repsol
- Block Z-1 – BPZ
- Block Z-2B – Petrotech
- Block XIII – Olympic
- Block 64 – Occidental
- Block 57 – Petrobras

The discoveries of new reserves have brought important projects in Peru.

Royalties

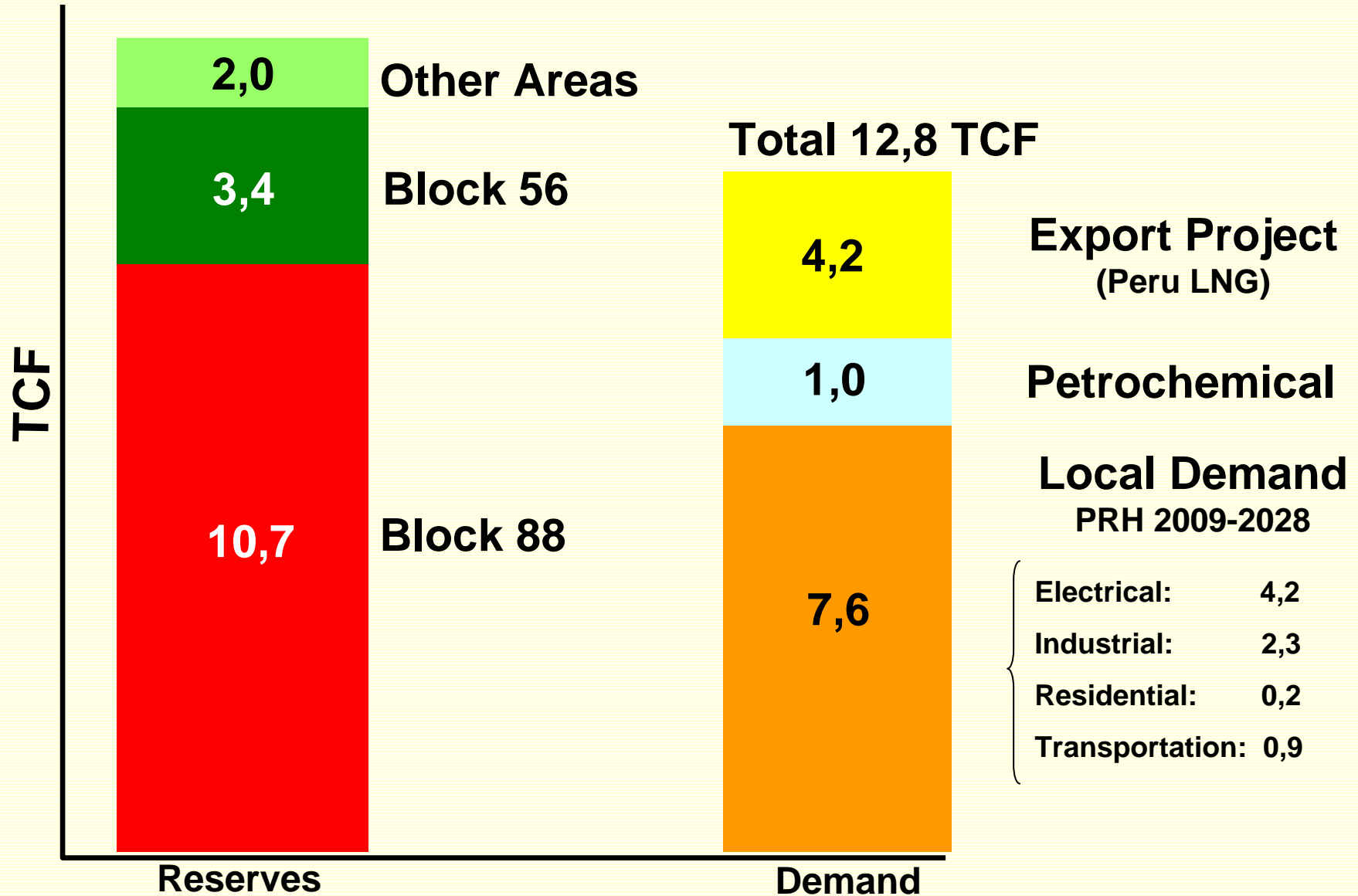


The use of Natural Gas

Peru has natural gas reserves and they will be used for its development. Because of that, Peru is developing a plan of gasification at national level.

Reserves and Natural Gas Demand (TCF)

Total 16,1 TCF



Regional Pipelines for the gasification of Peru



Regional Pipelines

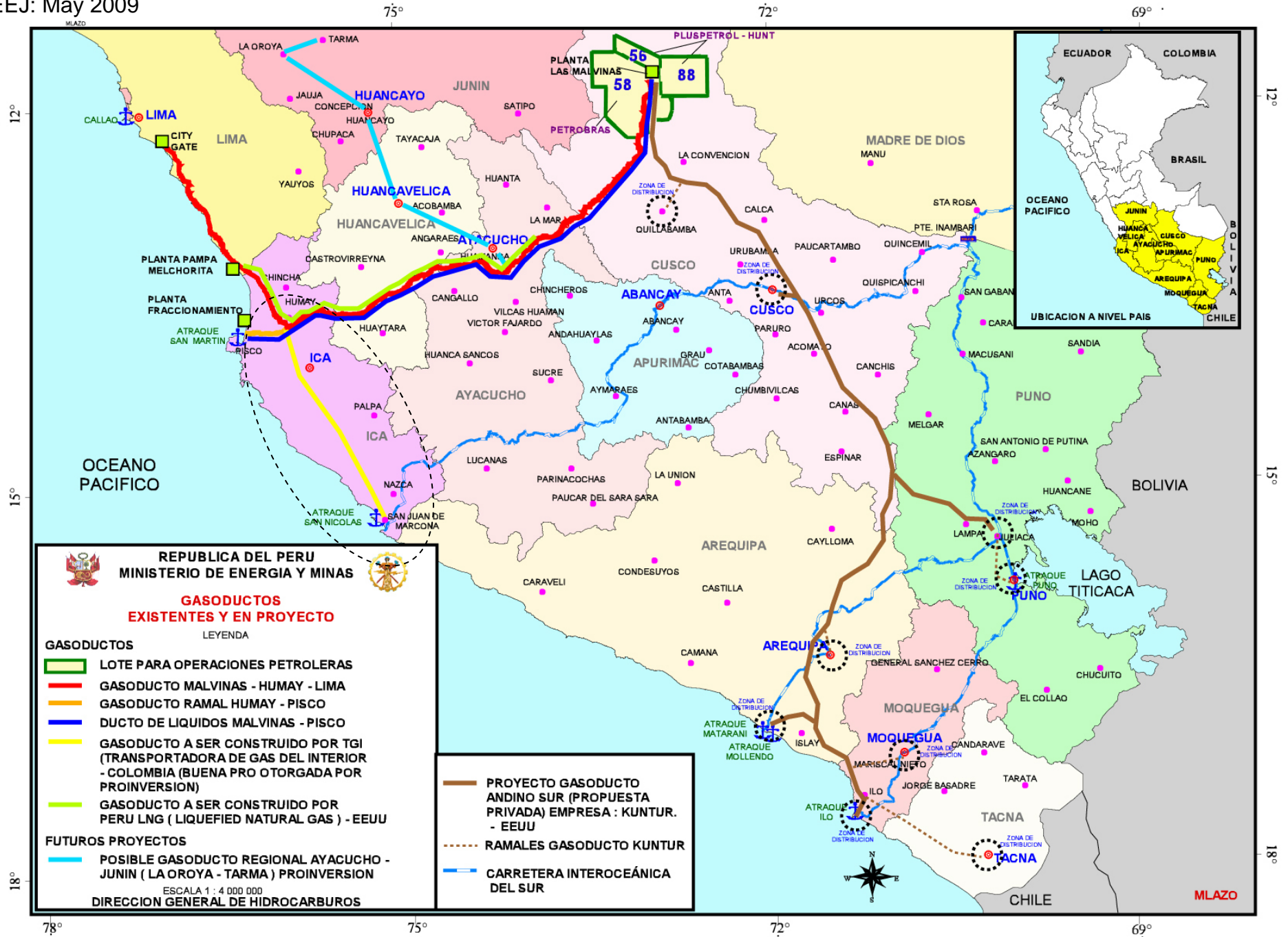
- The goal of the government is to promote the use of natural gas in the country, so it is working on a plan to build transportation and distribution systems of regional pipelines.
- Proinversión, granted the good pro to the partnership integrated by the Enterprise Energía of Bogota (EEB) and Transportadora de Gas del Interior (TGI), for the construction of the Natural Gas Distribution System in Ica, specifically in Pisco, Ica, Nazca and Marcona. It will start its operations in 2011.





Regional Pipelines

- In the same way, a contract has been subscribed with Kuntur Transportadora de Gas S.A.C. by means of which it was given a concession for the installation of a gas pipeline to transport natural gas from Camisea to the South coast in order to benefit Cusco, Puno, Arequipa, Moquegua, and Tacna. The company has started working on the Study of Environmental Impact
- Besides, through Proinversión, it is being analyzed the best alternative to install a pipeline in the Andes to benefit Ayacucho and Junín as well as a pipeline in Ancash.

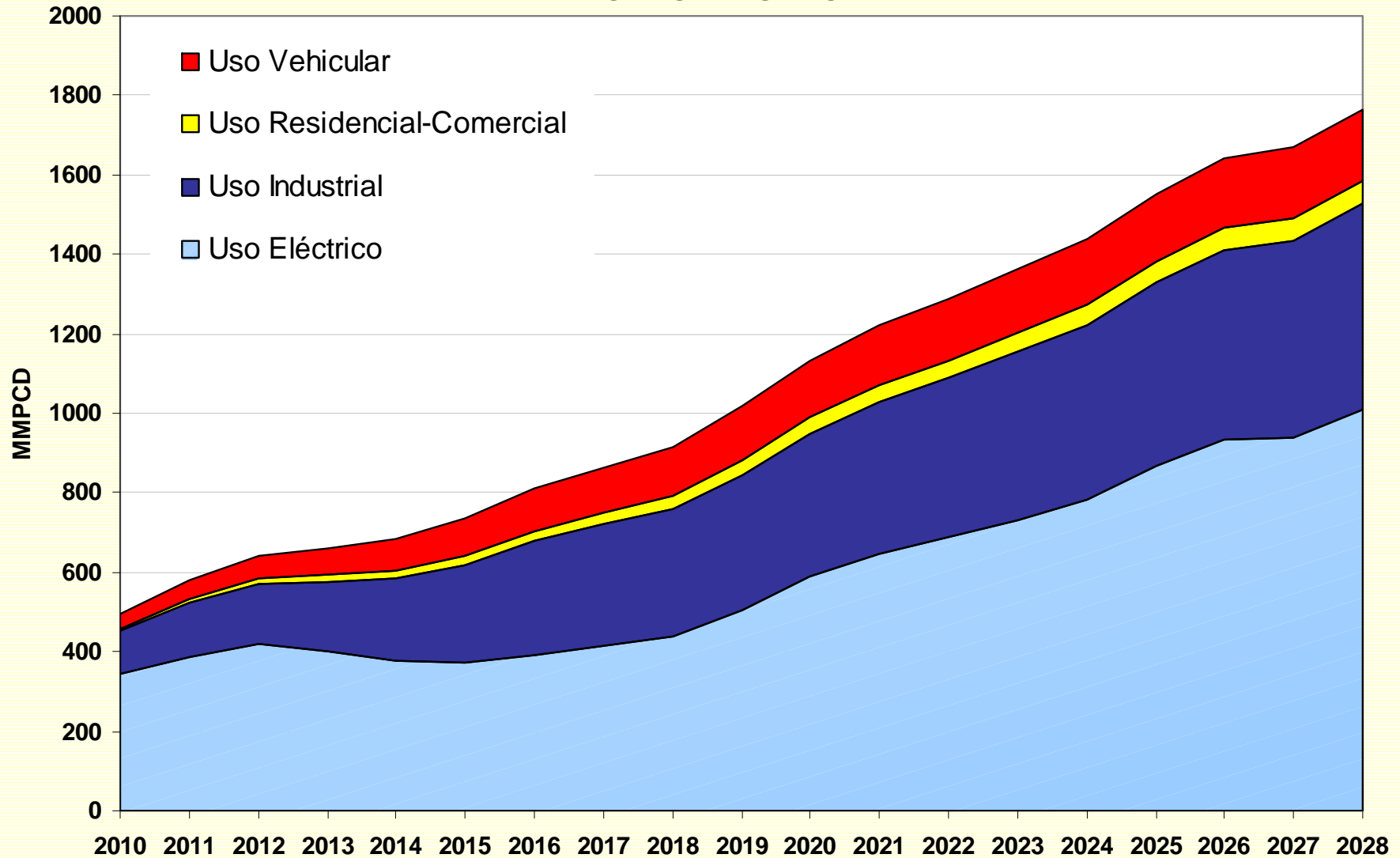


Availability of Natural Gas for the National Market from Camisea and the Areas near Camisea (2009-2017)

MMPCD	2009	2010	2011	2012	2013	2014	2015	2016	2017
1.- Availability of natural gas delivery from Blocks 66 and 56	1098	1098	1098	1368	1368	1368	1368	1368	1368
2.- Commitment from sale to Perú LNG		620	620	620	620	620	620	620	620
3.- Availability of natural gas delivery for the national market from Blocks 88 and 56	1098	478	478	748	748	748	748	748	748
4.- Possibility of natural gas delivery of other blocks located near Camisea							400	400	400
5.- Possible supply of natural gas of Camisea and near areas for the national market	1098*	478	478	748	748	748	1148	1148	1148

* The real delivery is limited by transportation capacity.

Projections of Natural Gas Demand 2010-2028



Thank you
jvvizcarra@minem.gob.pe