



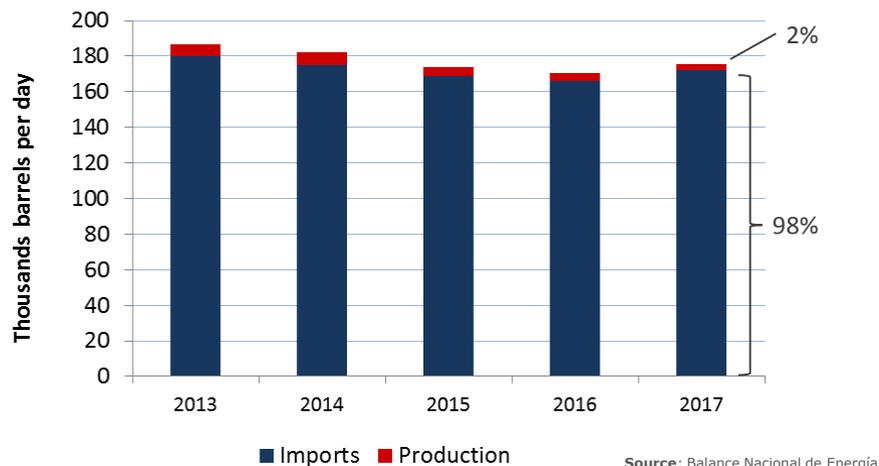
# Update on OIL AND GAS SECURITY Chile

**María Valenzuela**

**Engineer of the Hydrocarbons Unit - Energy Markets Division  
Ministry of Energy / Government of Chile**

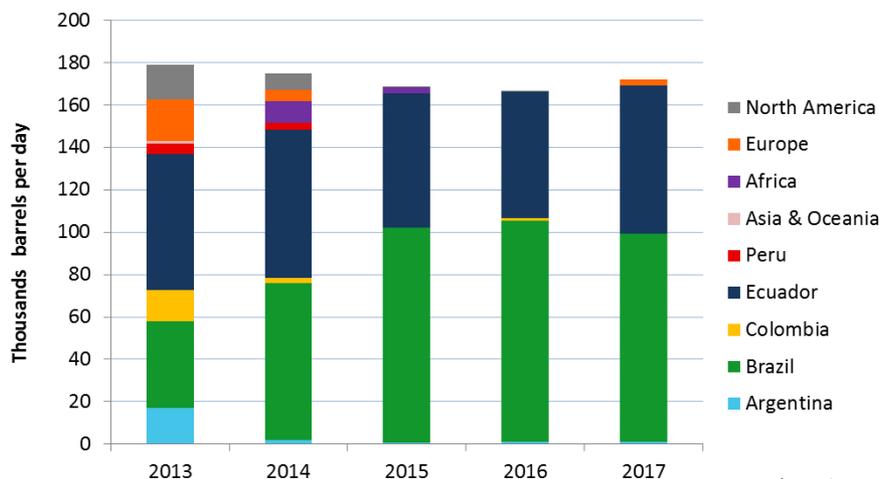
# Crude Oil Supply Security

Crude Oil Production and Imports, 2013 - 2017

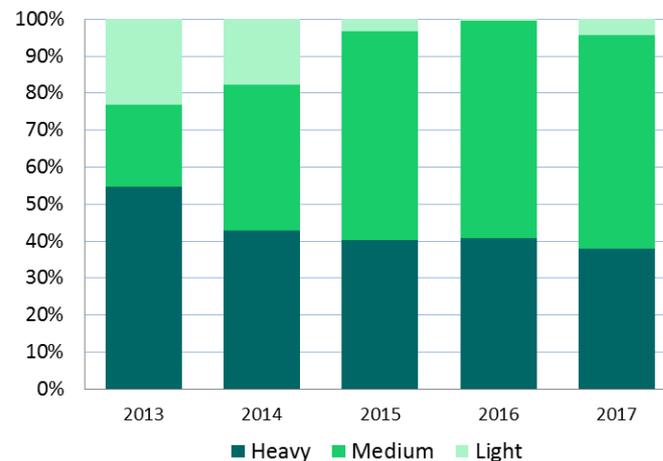


- Despite the existence of domestic production, the country is in essence a **net importer**.
- Chile does not export crude oil.
- Types of crude oil/condensate produced: **Light**

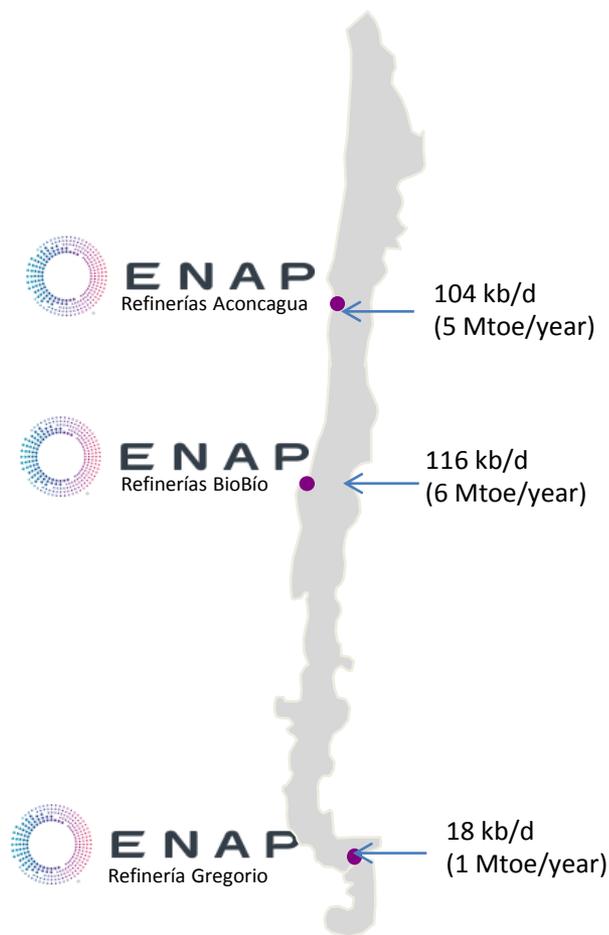
Crude Oil Imports by Origin



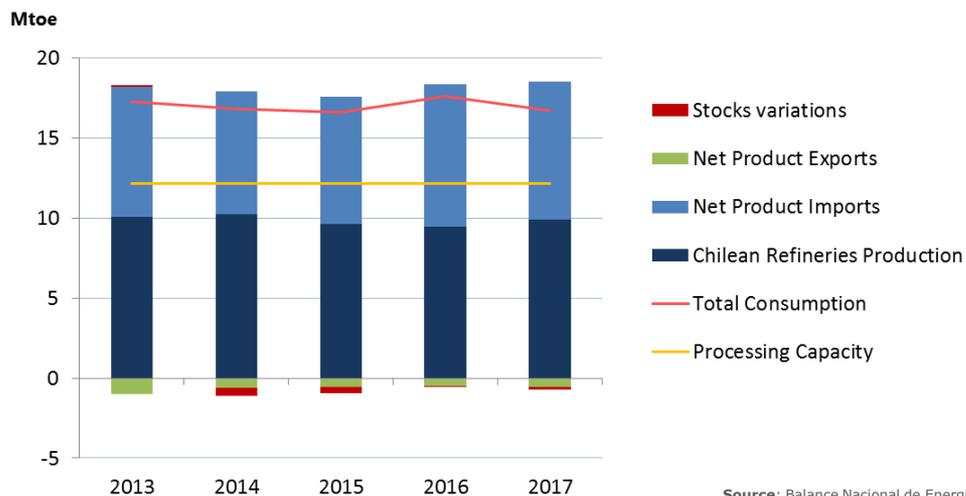
Types of Crude Oil Imported



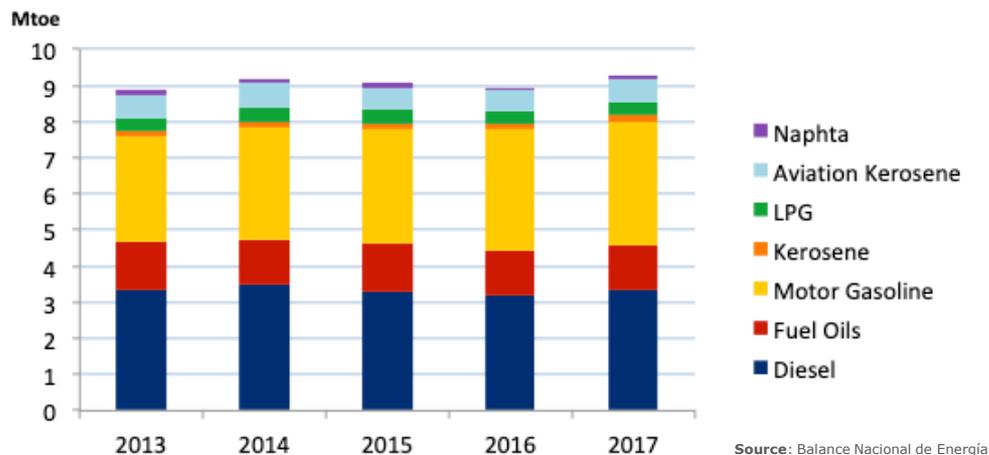
# Petroleum Products Supply Security



### Refinery Production, 2013- 2017

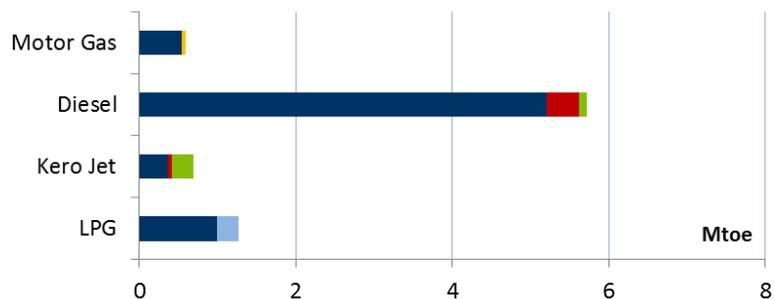


### Refinery Products, 2013- 2017



# Petroleum Products Supply Security

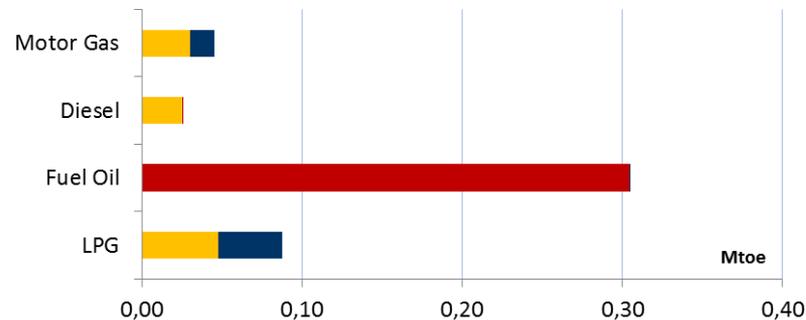
Oil Products Imports by Origin, 2017



Source: Cámara de Comercio de Santiago.

■ United States ■ Argentina ■ Japan ■ South Korea ■ Netherlands

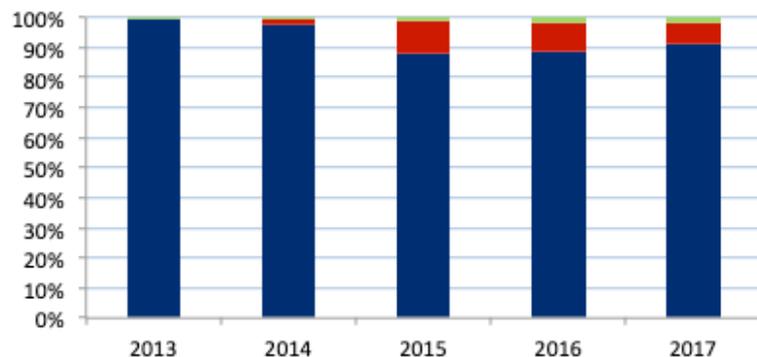
Oil Products Exports by Destination, 2017



Source: Cámara de Comercio de Santiago.

■ South America ■ Panama ■ United States

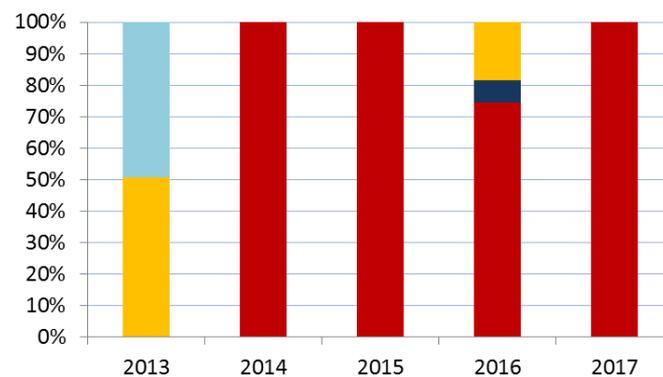
Diesel Imports by Origin, 2013-2017



Source: Cámara de Comercio de Santiago.

■ U.S.A. ■ Japan ■ South Korea

Fuel Oil Exports by Destination, 2013-2017

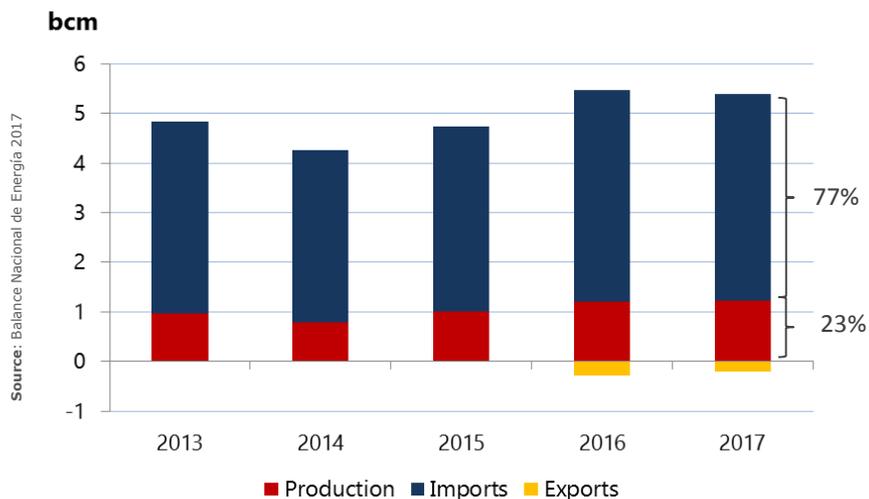


Source: Cámara de Comercio de Santiago.

■ Panama ■ United States ■ South America ■ Singapore

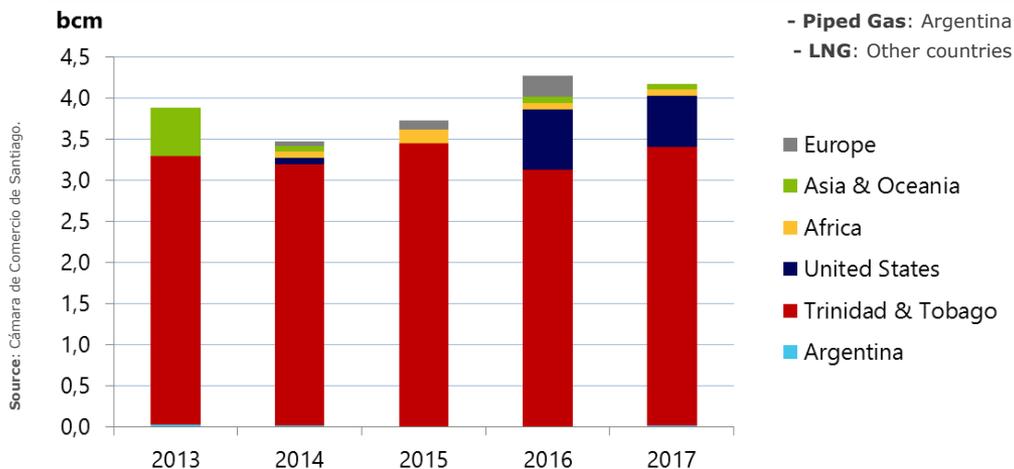
# Oil and Gas Supply and Demand Situation

## Natural Gas Production and Imports, 2005 - 2015

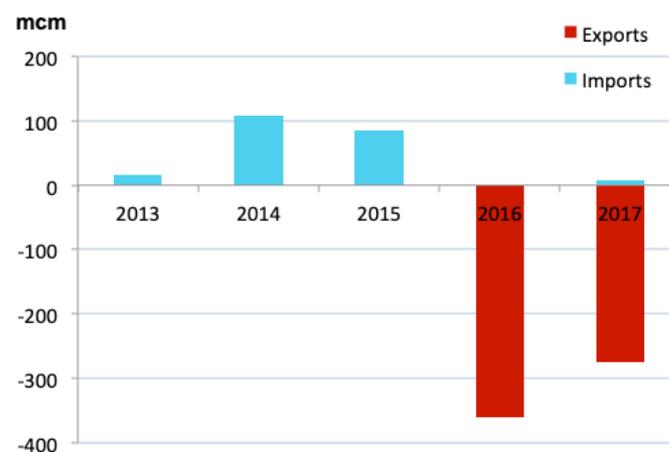


- Domestic natural gas is produced in the Magallanes Region, the southernmost region of Chile, and is used to meet local electricity and heating demand.

## Natural Gas Imports by Origin



## Piped Gas from/to Argentina



# Oil and Gas Supply and Demand Situation



Source: Energy Policies Beyond IEA countries – Chile 2018 review.

Terminal	Regasification Capacity [mcm/d]	Date of Operation
Mejillones LNG	5.5	July 2009
Quintero LNG	15	June 2010

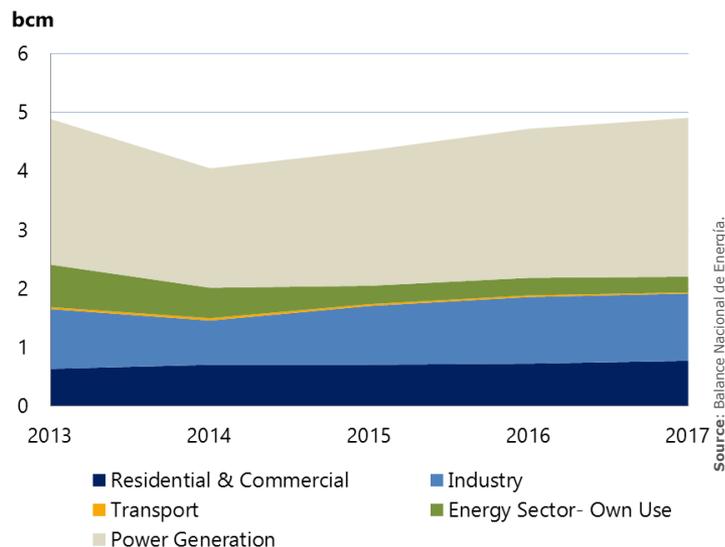
Transnational Gas Pipeline	Capacity [mcm/d]	Length [km]
Norandino	7.8	1056
GasAndes	10.8	541
Gas Pacífico	6.0	674
Cóndor-Posesión	2.0	9
Cóndor-Posesión 2	2.5	9

## Pemuco and the “Virtual Pipeline”

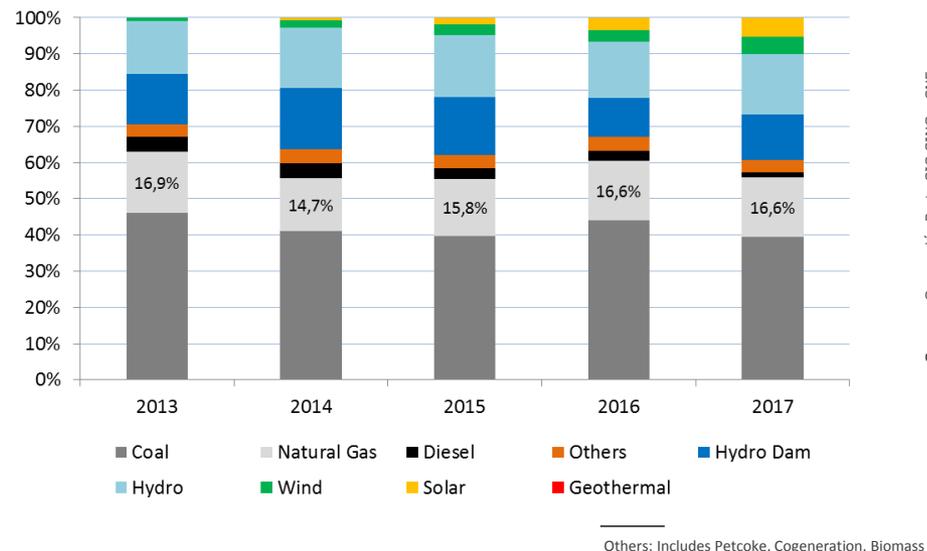
- Pemuco is a medium size regasification plant (0.6 million m<sup>3</sup>/d of gas) located in the Concepción area.
- LNG supplies are transported by truck from Quintero to Pemuco.

# Oil and Gas Supply and Demand Situation

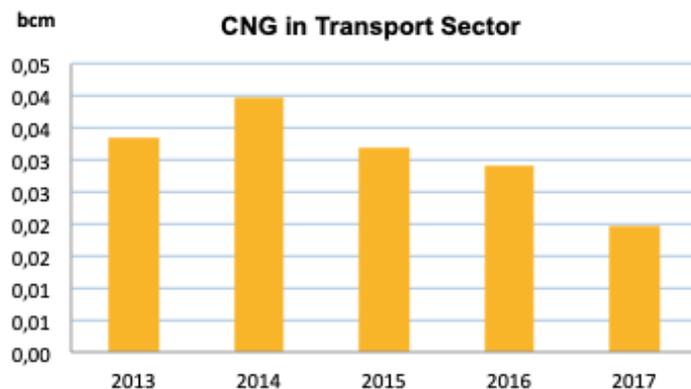
Natural Gas Demand by Sector, 2013 - 2017



Share of Natural Gas in Power Generation Mix, 2013 - 2017



CNG in Transport Sector



	Electric generation [GWh]				
	2013	2014	2015	2016	2017
Natural Gas	11543	10319	11389	12287	12370
Total	68483	70342	72145	73855	74648

- In September 2017, Enel and ENAP started operating Cerro Pabellón, South America's first geothermal power plant.

# Policy Framework

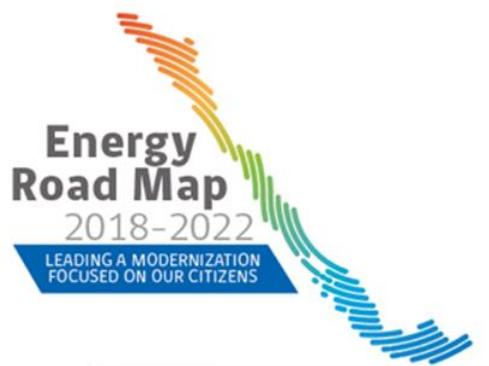
## National Energy Policy for 2050

By 2050, our energy system should have the following attributes in terms of quality and security of supply:

“The country has a robust and resilient energy system capable of managing risks, and can face and even anticipate the effects of energy crises, natural disasters, climate events, geopolitical conflicts, etc.”

**PILLAR 1**  
QUALITY AND  
SECURITY OF SUPPLY

## Energy Roadmap 2018-2022



**3<sup>rd</sup> Pillar: *Incorporate resilience in the development of energy systems.***

With the aim of mitigating the impacts of a critical scenario in the supply of fuel in the country, for example due to the occurrence of natural disasters and restriction of supply, we will work on adopting measures that allow us to face the scenario of fuel shortage, such as a fuel demand restriction management plan and public-private work to prepare a proposal that improves the fuel stocks system.

# Policy Framework

## Oil Stockpiling

Product	Storage [Thousands m <sup>3</sup> ]	Days of Stocks 2017
Crude Oil	518	19
Motor Gas	242	19
Kerosene	110	24
Diesel	404	15
Fuel Oil	71	23
LPG	242	38

- The stock level is monitored to accomplish 25 days.

- The Ministry of Energy during this year will develop the study:

### **“Analysis of inventories and fuel infrastructure”**

The objective is to determine what level of stockpiling is appropriate for Chile, studying the logistics infrastructure for its management, evaluating technical, economic and regulatory aspects for the implementation of the stockpiling.

## APEC-wide Regional Cooperation

### Binational Cabinet Peru-Chile, 2017

Commitment: Promote technical cooperation and intensify bilateral dialogue in specialized multilateral forums, in the area of regasification plants, as well as the exchange of experiences on the regulatory and commercial framework of the hydrocarbon chain, taking into account the principles of energy security and sustainable development.



### Gas exchanges Argentina - Chile



Both countries are benefited by this agreement, since for Chile it implies having energy at lower prices and with greater coverage, and for Argentina it is possible to dispose of surplus gas from the development of unconventional gas.



**Thank you**

**Update on OIL AND GAS SECURITY  
Chile**

Email Address: [mvalenzuela@minenergia.cl](mailto:mvalenzuela@minenergia.cl)

Contact Number: +56 2 22367 75 79