

Electricity Regulated Clients Chilean Open Auctions

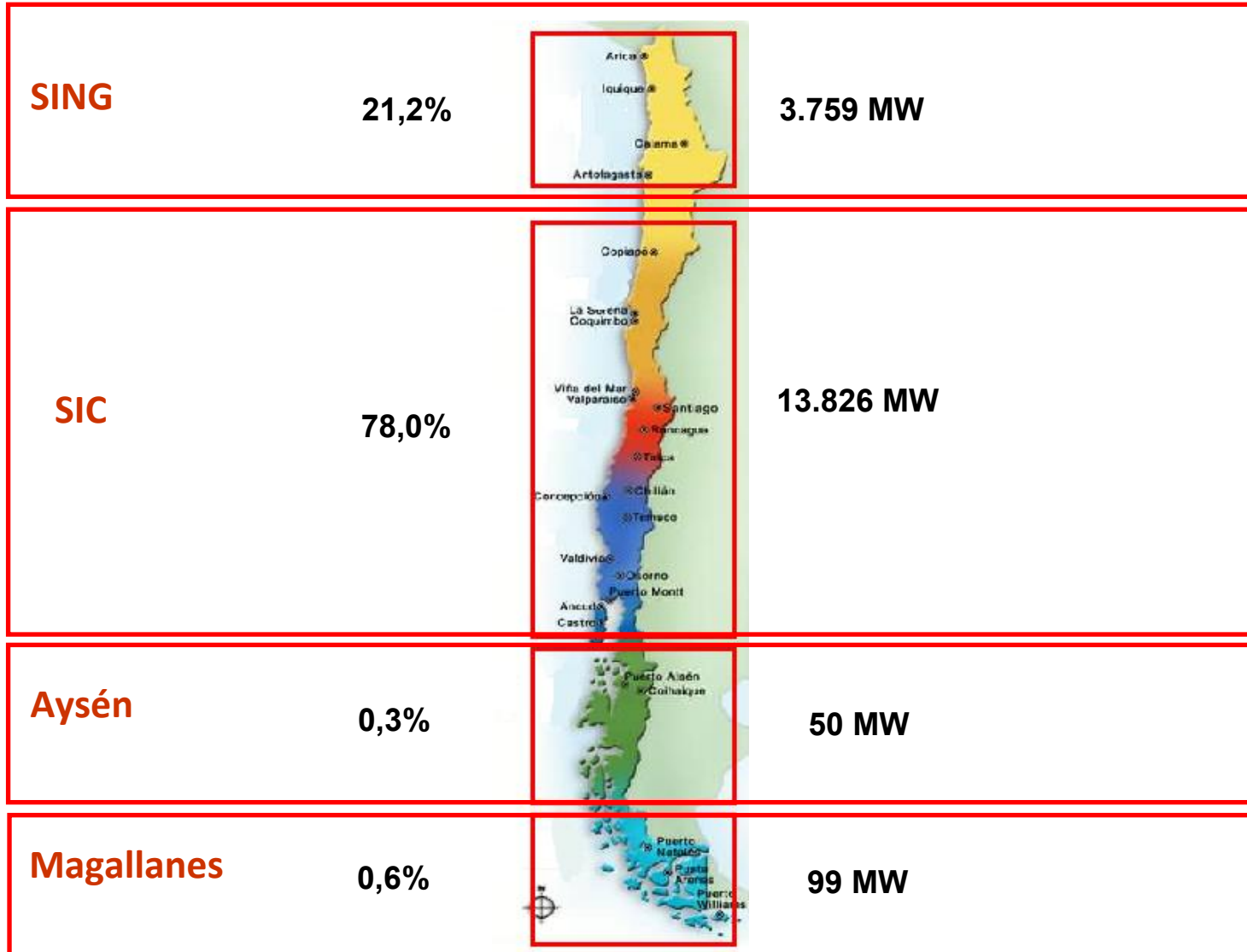


Gobierno
de Chile

MARCELO DRAGO
National Energy Commission
June 2014

Interconnected Systems and Medium Systems

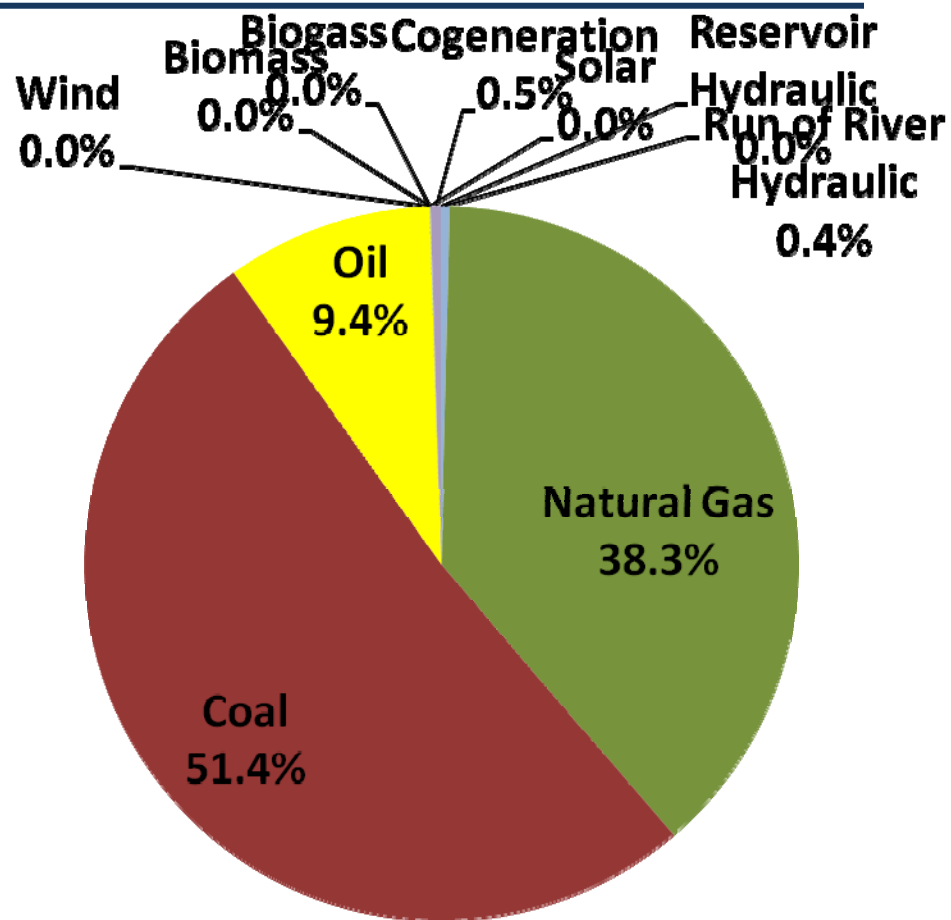
Installed capacity in Chile: 17.734 MW (net)



Capacity SING 2013



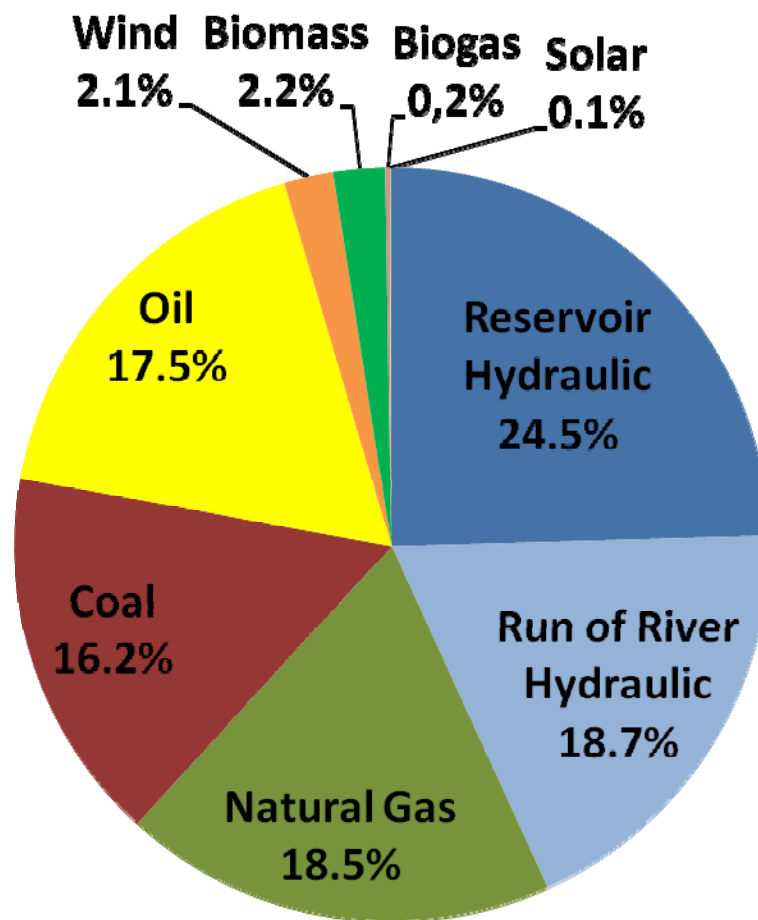
TECHNOLOGY	Installed Capacity (net) TOTAL [MW]
Coal	1.932,6
Natural Gas	1.441,2
Oil	351,9
Cogeneration	17,5
Run of River Hydraulic	14,9
Solar	1,4
TOTAL	3.759,4
Maximum Demand	2.243,3



Capacity SIC 2013



TECHNOLOGY	Installed Capacity (net) TOTAL [MW]
Reservoir Hydraulic	3.393,4
Run of River Hydraulic	2.580,3
Natural Gas	2.560,7
Coal	2.233,5
Oil	2.423,1
Wind	292,7
Biomass	306,8
Biogas	27,3
Solar	8,4
TOTAL	13.826,4
Maximum Demand	7.283,1



Electrical system segments



- Distribution comp
- Purchase price is

Companies
clients

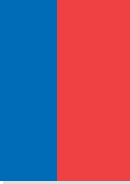


Projections of electricity sales 2014

System	Electricity Sales [GWh]	Free Clients	Regulated Clients
SIC	50.793	39%	61%
SING	16.591	89%	11%
TOTAL SIC-SING	67.384	51%	49%

- **Free Costumers:** More than 2.000 kW of connected capacity.
 - Energy price: Bilateral negotiations with generators.
- **Regulated Costumers:** Until 2.000 kW of connected capacity.
 - Energy price: Open bids.

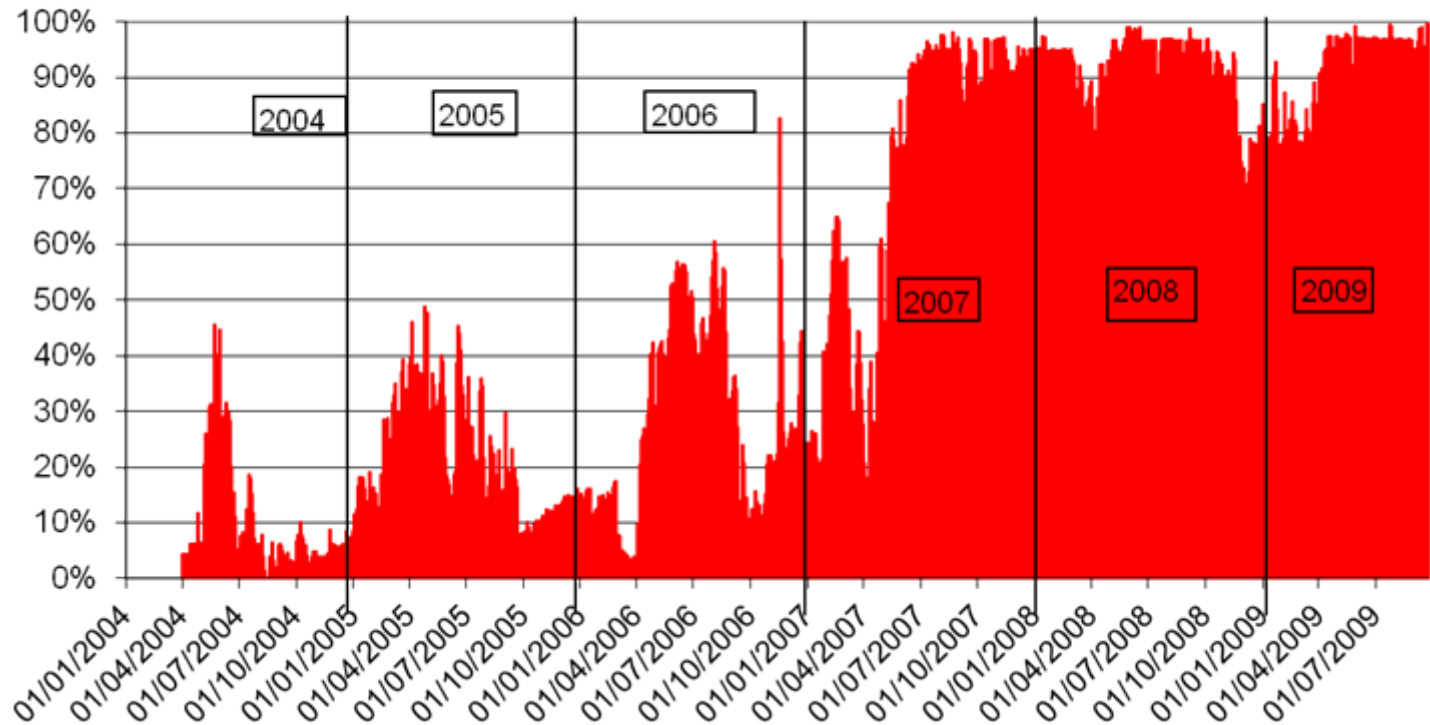
What happened?



Argentinian gas shortage 2003-2004

- Uncertainty
- Investment absence

**Restricciones de Gas desde Argentina
(en % respecto de requerimientos normales)**



Law 20.018 (2005)

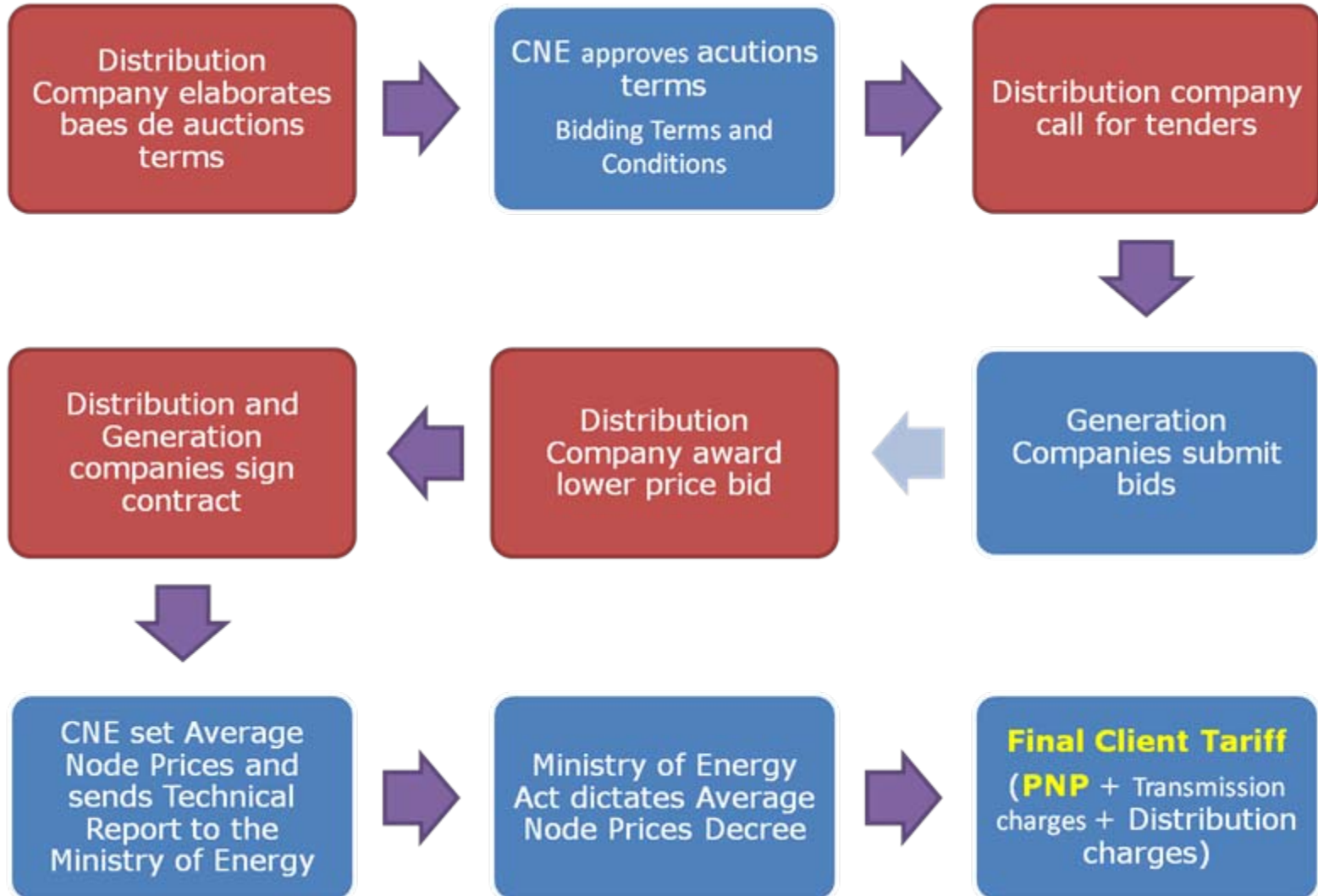


- ❑ Distribution companies must have under contract their electricity supply at least for the following 3 years.
- ❑ These contracts must be obtained under public auctions , opened, non discriminatory and transparent.
- ❑ Bidding Terms elaborated by distribution companies but approved by National Energy Commission.
- ❑ Contract life no longer than 15 years
- ❑ Ceiling prices based on a price band over Short Term Nodal Price

The law

- ❑ New system based on open auctions contracts of electricity supply for regulated clients.
 - Long term contracts.
 - award price does not change along the contract term, except on indexation.
 - Maximum bidding price is limited through Nodal Prices Decrees.
 - Lower price award
- ❑ Electricity new price regime .
 - Each contract energy buying price.
 - Price transferable to regulated client is contract's average price, not buying price .
- ❑ Formula to avoid large price differences among regulated clients along different distribution companies

Auctions process



Ceiling price



- ❑ Ceiling price or maximum bid price set on the ceiling of the Market Price Band, incremented in 20%
- ❑ Market Price Band, a band between 5% and 30% of market average of free and regulated contracts.

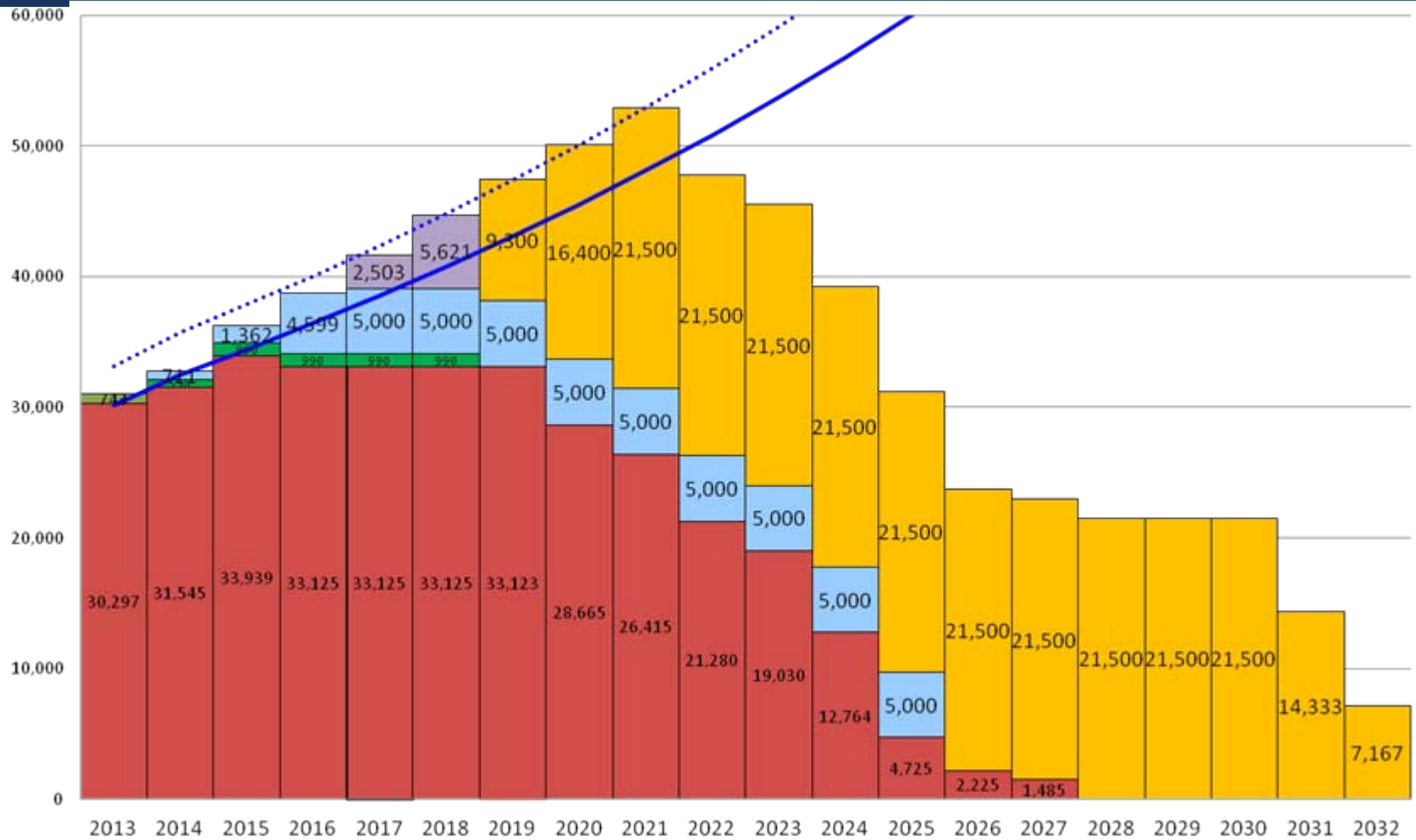
Price adjustment mechanism

- ❑ Prices transferred from the distribution company to their clients is the average of the weighted (by supply volume) average of their contracts
- ❑ However, if average price of one distribution company exceeds more than 5% weighted average of the system, average price of that particular distribution company must be adjusted, to override the excess.
- ❑ Price differences is absorbed by average prices of the others distribution companies.

Auctions results

Auctions	Ceiling Price [US\$/MWh]	% tender deserted	Average Price (indexed ene-2014) [US\$/MWh]	Energy [GWh]
2006/01	62,7	11%	65,1	11.851
2006/01- 2	62,7	0%	81,6	1.130
2006/02	61,7	61%	61,2	5.700
2006/02-2	71,1	80%	74,2	1.800
2008/01	125,2	11%	111,9	7.821
2008/01-2	125,2	0%	106,7	935
2010/01	92,0	18%	97,2	2.200
2012/01	129,5	0%	127,0	924
2012/03-2	140,0	85%	136,7	248
2013/01	129,0	22%	128,2	3.900
Total			87,3	36.508

Next auctions



- Contratado
- Res. SEC 2.288
- CGE (campanario)
- SIC 2013/03
- SIC 2013/02
- SIC 2014/01
- Demanda Licitantes
- ⋯ Sobre-contratación (10%)

Government Energy Agenda

- ❑ Reduce in 25% regulated clients auctions prices on next decade
 - ❑ Modify auctions legal rules to attract new actors
 - ❑ Promote new investments
- ❑ Long and Short term auctions redesign
 - ❑ Change timings:
 - ❑ longer time to prepare proposals
 - ❑ Longer time
 - ❑ Precio de Reserva
- ❑ Develop a robust transmission system
- ❑ Interconnection SIC-SING





**Gobierno
de Chile**

MARCELO DRAGO
Comisión Nacional de Energía
Junio 2014

Energías Renovables No Convencionales (ERNC)



- ❑ Corresponde a la energía eléctrica generadas por medio de las siguientes fuentes:
 - 1) Biomasa
 - 2) Hidráulica, con potencia máxima inferior a 20 MW
 - 3) Geotérmica
 - 4) Solar
 - 5) Eólica
 - 6) Marina
 - 7) Otros medios determinados por la CNE, que utilicen energías renovables, contribuyan a diversificar las fuentes de energía y causen un bajo impacto ambiental.

Ley de ERNC (Ley 20.257 de 2008)

- ❑ Objetivos principales de la Ley fueron la **diversificación** de las fuentes de suministro eléctrico, con el desarrollo de **fuentes propias**, disminuyendo la dependencia de los mercados externos y aumentando la **sustentabilidad** de la matriz.
- ❑ La Ley 20.257 constituye un instrumento importante en el fomento de las ERNC.
 - Contribuye a la **sustentabilidad económica** de los proyectos ERNC.
 - Está diseñado para incentivar el desarrollo de **ERNC eficientes**.

Disposiciones Ley de ERNC



- ❑ Obligación a los retiros de un 10% generados por ERNC.

Precisiones:

- Meta progresiva de 5% en 2010 hasta 10% en 2024.
- Acreditación de cumplimientos sólo con unidades generadoras instaladas a partir de 2007.
- Obligación sobre aquellos contratos firmados con posterioridad al 31 de agosto de 2007.

Disposiciones Ley de ERNC

- ❑ Obligación a los retiros de un 10% generados por ERNC.
- ❑ Posibilita fuente de **ingreso adicional** para el financiamiento de proyectos ERNC
 - Se permite transar a otras empresas los excedentes de generación ERNC, para el cumplimiento de sus obligaciones.
- ❑ Cargo de 0,4UTM por MWh (~30 US\$/MWh) incumplido.

→ **Similar a esquema de cuota y certificados transable**

Modificación Ley de ERNC (Ley 20.698 de 2013)



- ❑ Aumenta la meta a 20% al año 2025
- ❑ Incorpora de licitaciones especiales para proyectos nuevos ERNC, necesarios para cumplir con la meta.
 - Valorización de inyecciones al mercado spot: Precio ofertado, dentro de una banda.
 - Derecho por 10 años.
 - Nueva obligación sobre aquellos contratos firmados con posterioridad al 1 de julio de 2013.

Mecanismo de ajuste de precios

