



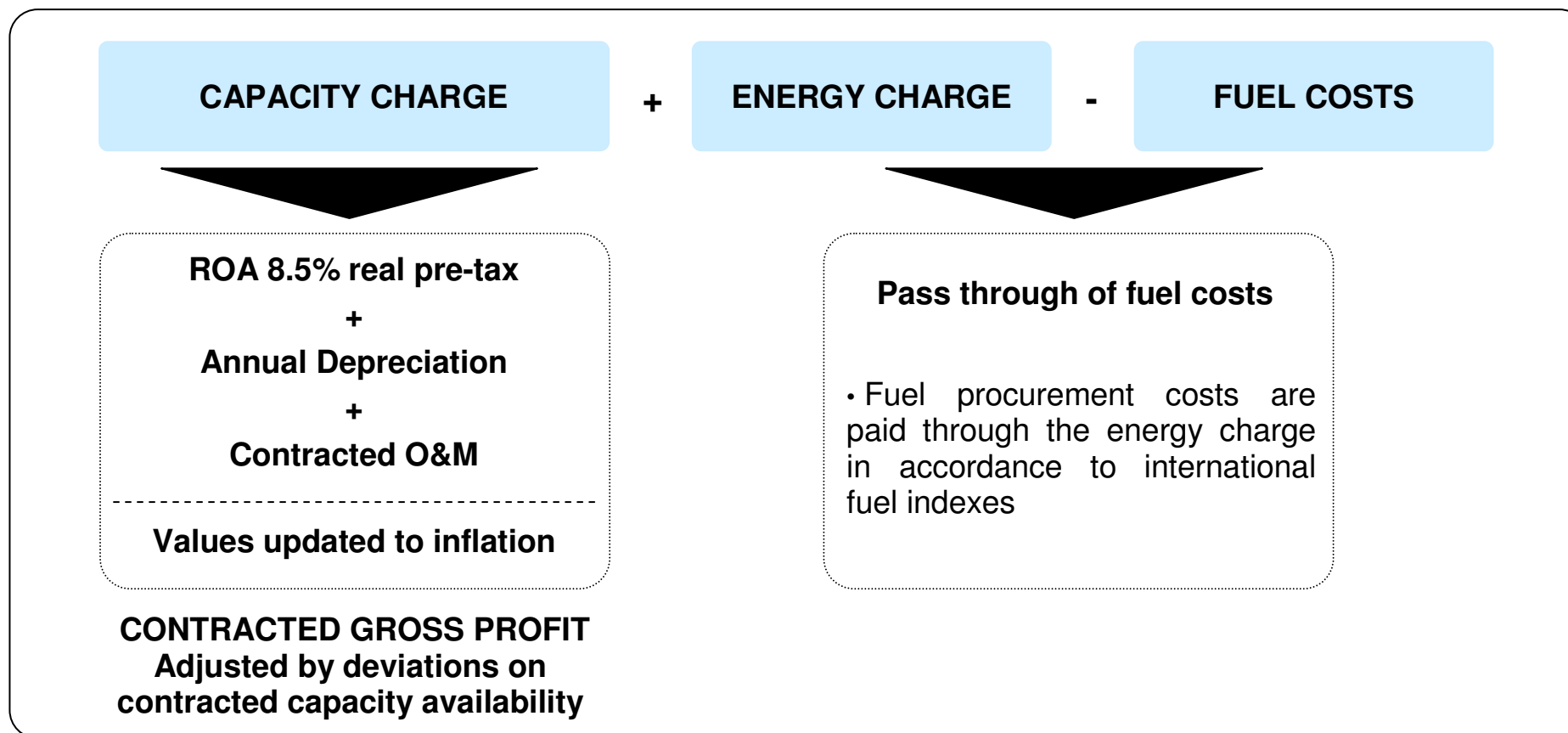
edp

***PPAs/CMECs
Legislation Package***

Lisbon, February 16th, 2007



Economics of edp's PPAs in Portugal



Other Issues:

- Costs with CO2 licenses are supported by REN and passed through to tariffs
- Investments during the life time of PPA also remunerated at ROA of 8.5% real pre-tax

High Quality Assets: Highlight goes to Hydro and Coal



Plants	MW	GWh*	Plant Type	Started in	Large M. Works	End of PPA
Total Hydro	4.095	9.412	26 plants			
Alto Lindoso	630	831	Reservoir	1992		2024
Miranda	369	846	Run of river	1960/95	1970	2013
Agueira	336	219	Reservoir/Pumping	1981		2024
Valeira	240	641	Run of river	1976		2024
Bemposta	240	853	Run of river	1964	1969	2013
Carrapatelo	201	752	Run of river	1971		2024
Picote	195	794	Run of river	1958	1969	2013
Frades	192	273	Reservoir/Pumping	2005		2027
Pocinho	186	389	Run of river	1983		2024
Régua	180	593	Run of river	1973		2024
Castelo de Bode	159	391	Reservoir	1951	2003	2015
V.Nova/Paradela	144	412	Reservoir	1951/56	1994	2015
Torrão	140	218	Reservoir/Pumping	1988		2024
Fratel	132	325	Run of river	1974	1997	2020
Vilarinho Furnas	125	187	Reservoir/Pumping	1972/87		2022
Crestuma-lever	117	298	Run of river	1985		2024
Cabril	108	272	Reservoir	1954	1986	2015
Alto Rabagão	68	78	Reservoir/Pumping	1964		2015
Caniçada	62	317	Reservoir	1954	1979	2015
Tabuaço	58	127	Reservoir	1965		2024
Bouçã	44	152	Reservoir	1955	1988	2015
Salamonde	42	217	Reservoir	1953	1989	2015
Pracana	41	52	Reservoir	1950/93	1993	2024
Caldeirão	40	48	Reservoir	1994		2024
Raiva	24	52	Reservoir	1982		2024
Touvedo	22	75	Reservoir	1993		2024

26 large hydro plants:

- Reservoir: 39% of capacity
- Run of river: 45% of capacity
- Reservoir/
Pumping: 16% of capacity

Thermal Plants

	MW	End of PPA
Thermal	3,102	
Sines (Coal)	1,192	2017
Setúbal (Fuel-oil)	946	2012
Carregado (Fuel-oil)	710	2010
Barreiro (Fuel-oil)	56	2009
Tunes (Gas oil)	165	2007

5 thermal plants:
Sines with deNOx-deSOx facilities**
Fuel-oil to be decommissioned

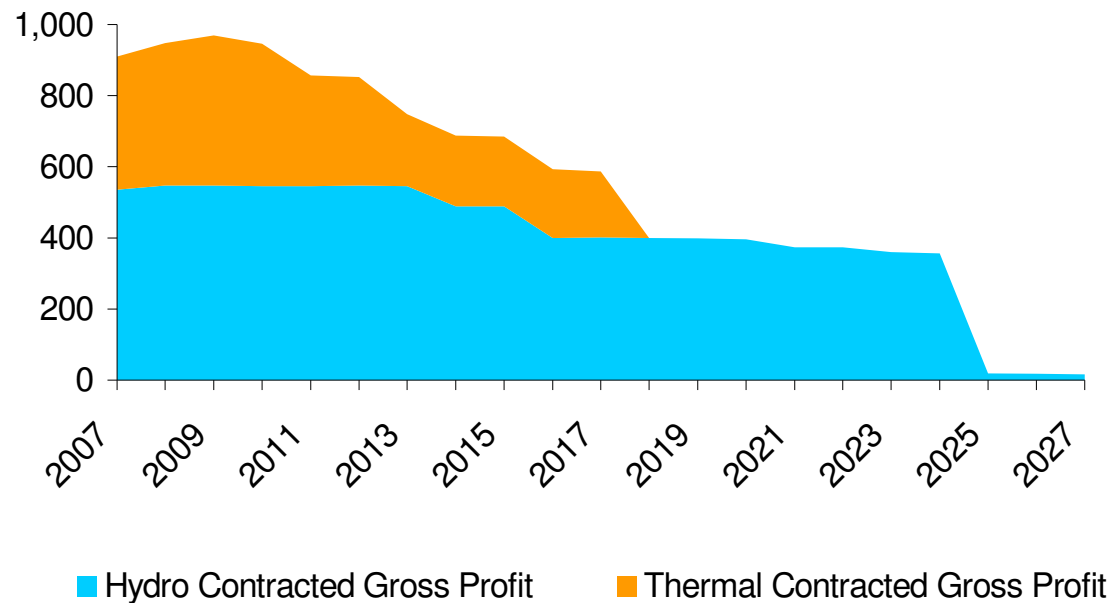
* Average Hydro Year

** from 2010 onwards **2**

PPAs: Stability over contracts' lifetime vs. rights afterwards



PPAs Contracted Gross Profit



After the end of PPAs

- Hydro Plants:

edp and REN should agree on the economic framework for the plants' operation afterwards. If no agreement is achieved, PPAs grant to edp the right to a contracted residual value.
- Thermal plants:

edp acquired in 2005 the plant sites of Setúbal, Carregado and Tunes for €43.6m. assuring the right to built new plants on these sites

edp pays a rent for the usage of Sines and Barreiro (these sites are public domain)

Predictable gross profit: decline driven by thermal plants' decommissioning and end of PPAs in hydro

edp intends to assure long term growth in clean generation



Plants with PPAs satisfied 58% of Portuguese electricity demand in 2006 (edp's PPA plants 41%)

Single-buyer system restricts market liquidity and is not in line with EU liberalisation directives

Portuguese and Spanish governments committed on the promotion of a liquid and efficient MIBEL



CMECs

(Costs with the Maintenance of Contractual Equilibrium)

CMECs preserve the NPV of PPAs for edp's shareholders and provide electricity market liquidity

CMECs system was already approved by the European Commission in 2004

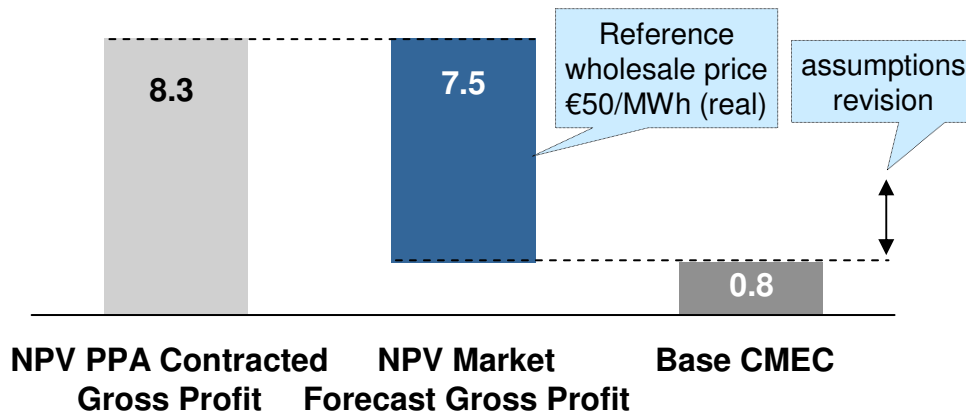
CMECs allow a short term decline of electricity tariffs and grant a securitization option to edp

CMEC mechanism: Main Assumptions



Calculation of the Base CMEC¹

Billion euros



CMEC calculation assumptions:

Cash Flows Discount Rate: Portuguese Government Bond Yield (Maturity Jun-14) +25 b.p.

Avg. wholesale electricity price: €50/MWh (real)²

Oil price: Brent at USD63/bbl in 2010

Coal price: €43/ton CIF in 2010

Base CMEC: to be paid by all consumers through TPA tariffs until Dec-27

Annual Revisibility: From Jul-07 to Jun-2017

Annual gross profit in market \Rightarrow forecasts \neq reality

Lead to financial compensation between edp and the system in the year after. (t+1)

Contracted gross profit will continue stable over the next 10 years

¹ Assuming the transfer from PPAs to CMECs in 30-Jun-07 and a 4.41% discount rate

Final Revisibility: 30-Jun-2017

Update of market forecasts until Dec-2027

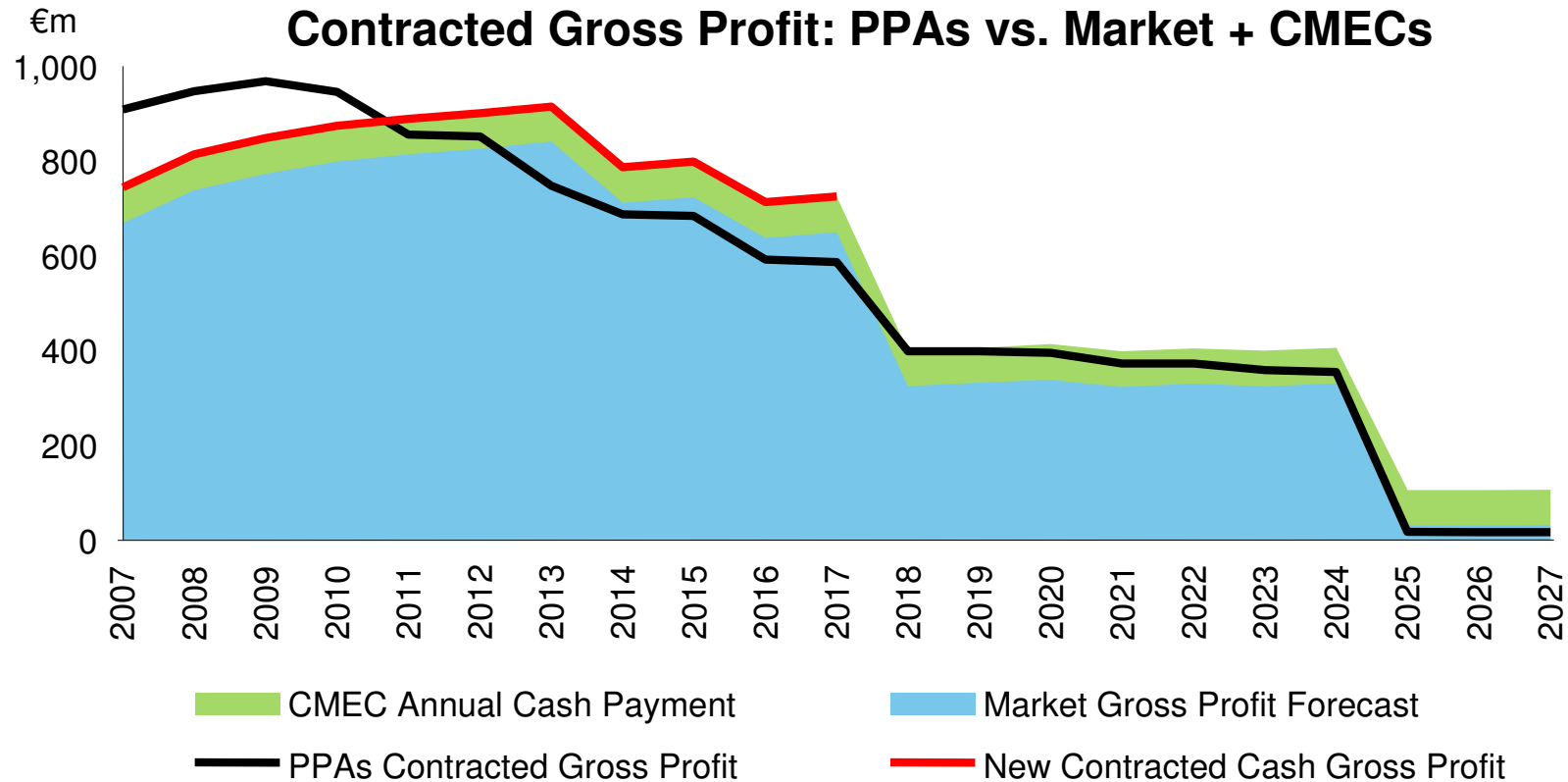
Recalculation of additional CMECs (to be received/paid through TPA tariffs until Dec-27)

No further financial compensations if market forecasts \neq reality

No further adjustments to market reality from 2017 onwards

² Includes capacity payments and ancillary services

Gross Profit Stability Assured until 2017



No impact on edp's P&L: Reported gross profit will be similar to PPAs gross profit until 2017

EDP will continue to benefit from a stable contracted gross profit until 2017

Lower "cash gross profit" in 2007-10 compensated by edp's option to securitize base CMECs

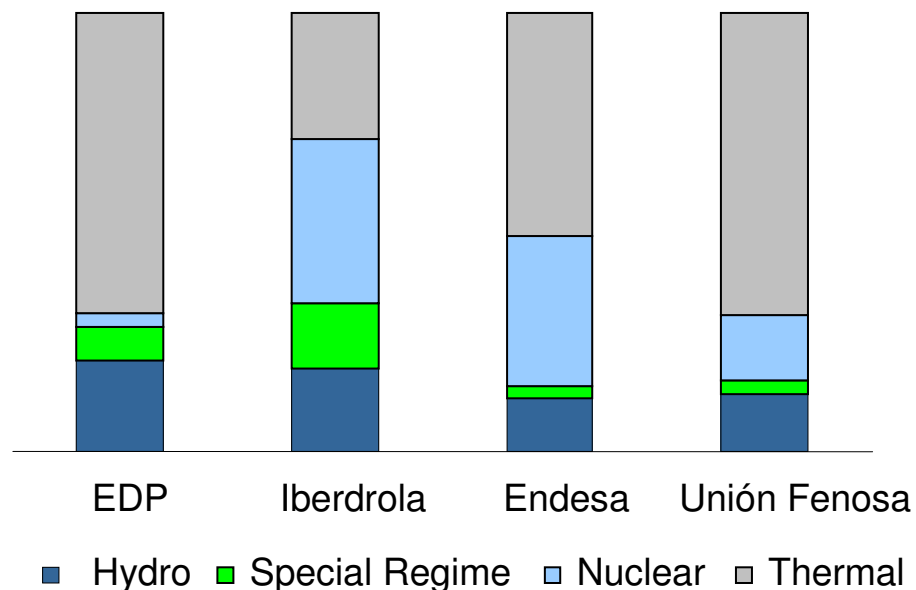
edp sees hydro as a key energy source in its portfolio



Why is hydro so important

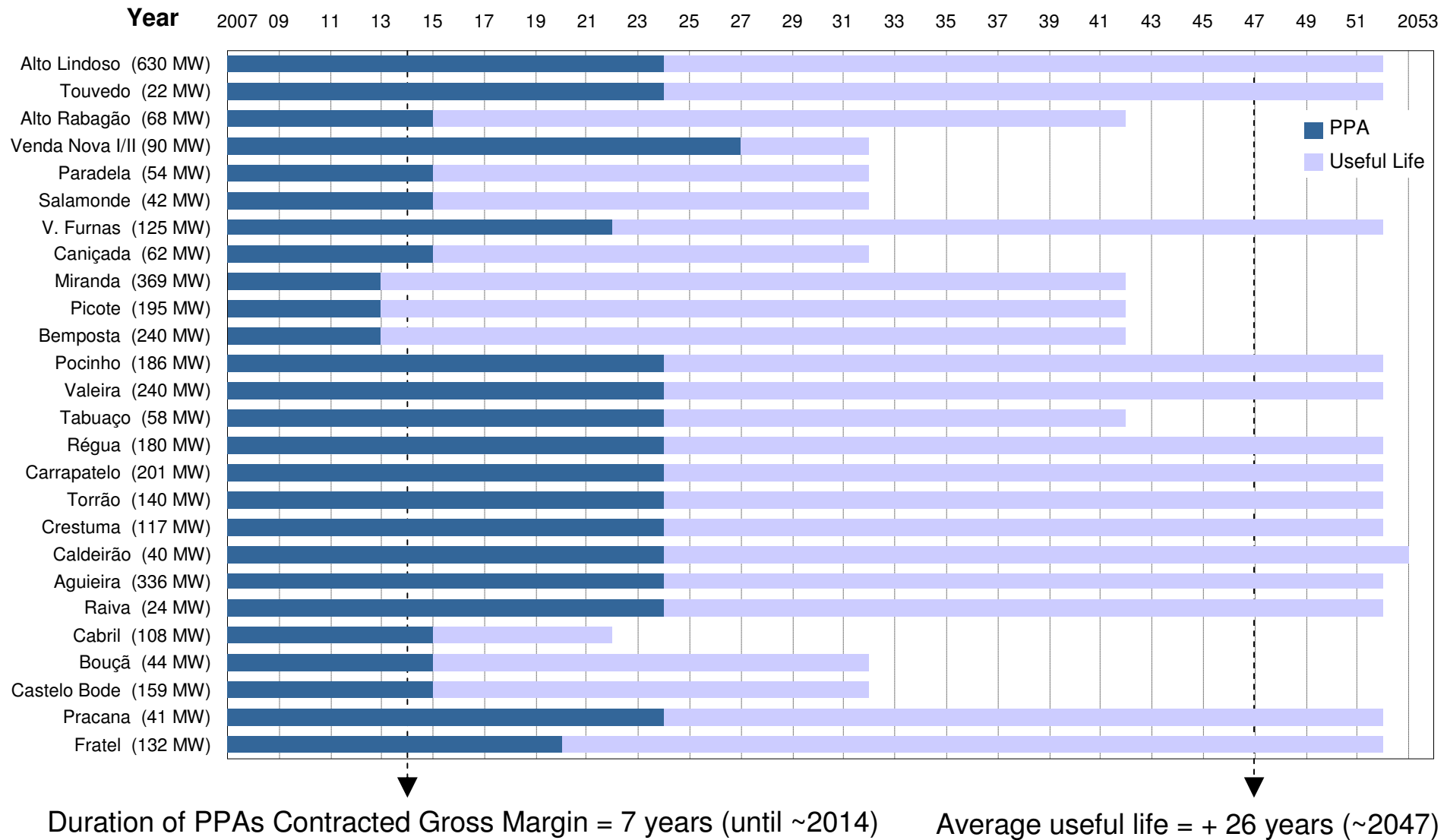
- Zero marginal cost, no volume risk in merit order
- Key to maintain a stable system, compensating wind power growth
- CO₂ emissions free: Currently the most efficient renewable energy
- Flexible output timing: Sells in peak hours, above avg. market price
- Hydro assets are scarce and are not for sale in Europe

Generation Mix Iberian Utilities (2006)



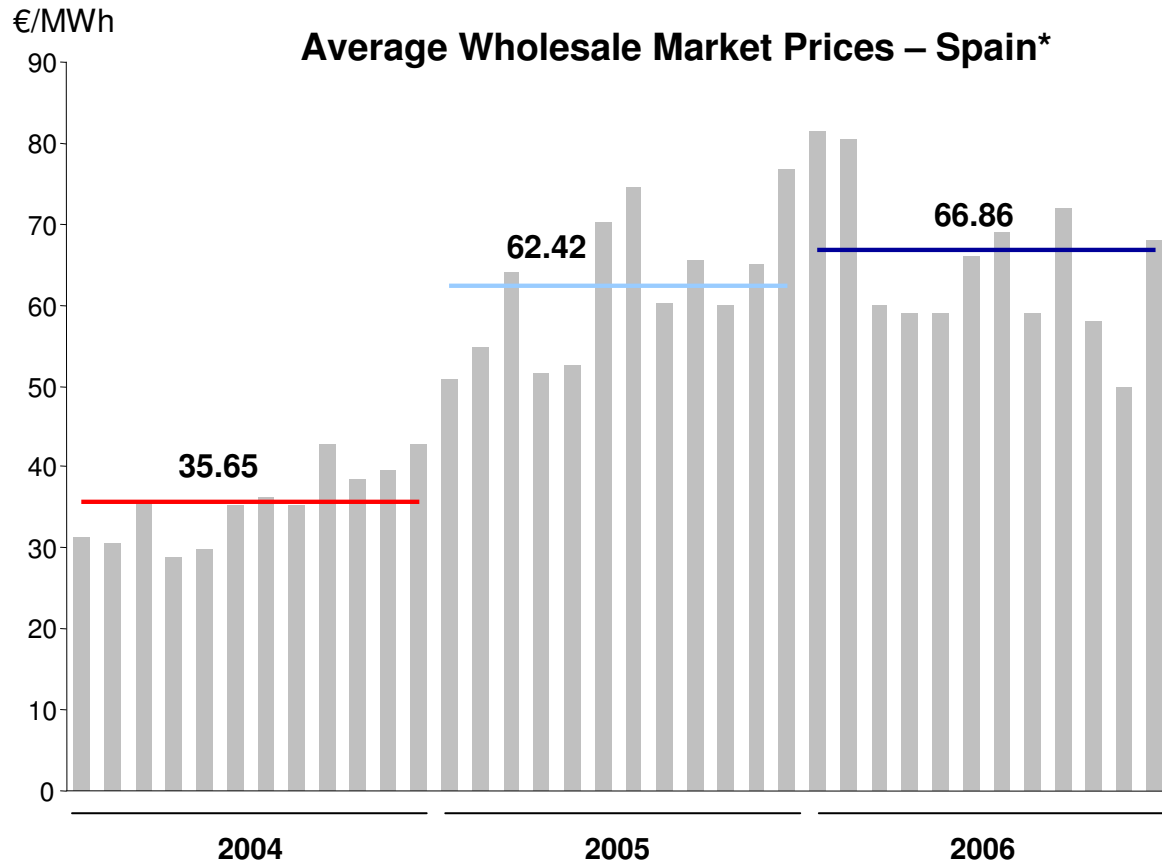
- edp has currently the highest exposure to hydro power in Iberia, supported on its plants under PPAs
- edp has strong in-house hydro engineering skills both in terms of:
 - Operation & maintenance
 - New capacity/repowering projects

After the end of PPAs hydro plants still have 26 years of additional theoretical useful life



useful life set by independent valuations in 1994

The long term prospects for electricity prices changed significantly between 2004 and 2007...



OTC Baseload Market Prices**

OTC Markets	Contracted period	Price €/MWh
On 27/Dec/2004:		
Spain	Dec-05	30.69
France	2005	33.01
Germany	2007	34.55
On 8/Feb/2007:		
Spain	2008	50.63
France	2010	49.28
Germany	2010	52.75

Even for the 2008-2009 period with concerns on CCGTs overcapacity in Iberia electricity prices continue above €50/MWh

In the long term, energy prices should be driven by growth of world energy demand and increasing concerns with CO2 emissions

* Include capacity payment and deviations market

** do not include capacity payment and deviations market

Economics of hydro plants operation after PPAs



CMECs agreement in 2004

- edp agreed to operate its hydro plants in the market after the end of PPAs and until the end of hydro concessions
- edp agreed not to receive PPAs contracted residual value

• **Long term forecast for electricity wholesale price: €36/MWh (real)**

- In 2004, with a €36/MWh price forecast, contracted residual value was considered in line with market residual value

- Timing for final financial implementation remained dependent on having a single Iberian electricity market (MIBEL) in place

2007 Adjustments on CMECs 2004 agreement

- Stabilisation of wholesale market rules and new contracting formats (OMIP, regulated distribution forward auctions) should finally create the conditions for start up of MIBEL and CMECs as stated in Badajoz summit.

• **Long term forecast for electricity wholesale price: €50/MWh (real)**

- Government has stated that the market residual value will be calculated by two independent valuations leading to a payment by EDP

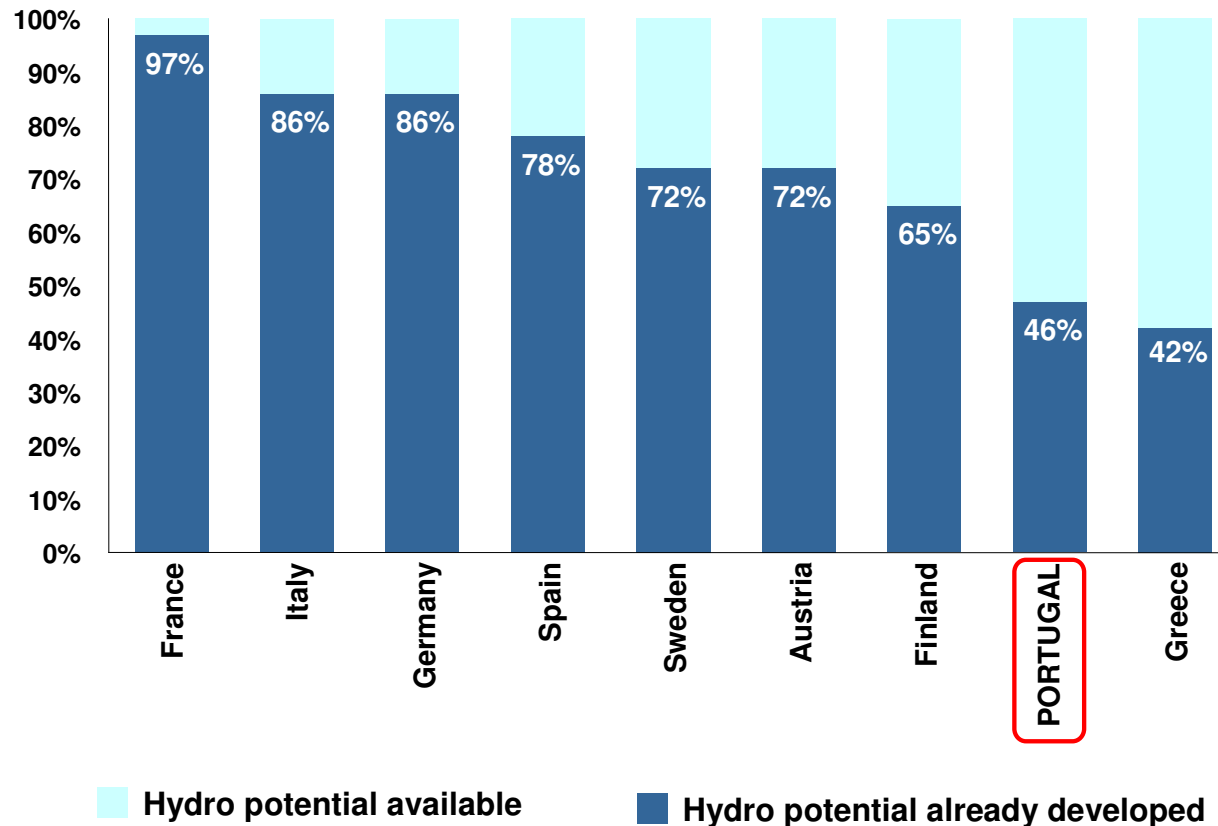
- WACC applied to hydro cash flows in the market after PPAs should be in line with the consensus for independent merchant generators in Europe
- Payment terms to be defined in the short term

edp reaffirms its view on the high strategic long term value of hydro plants

Portugal still has 54% of hydro potential to de developed



Undeveloped hydro capacity potential in Europe



- PPA system did not promote repowering projects
- Low number of new hydro projects after 1995
- one of the few European countries with a significant hydro potential to be developed

Start of CMECs and clarification of economics of hydro plants after the end of PPAs should relaunch repowering and new capacity hydro projects

edp intends to create value with additional hydro



Repowering projects of existing hydro plants

Power Plant	MW	Capex (€ million)	Status	Expected Entry into service
Picote II	231	130	Waiting environmental compliance	2011
Bemposta II	178	130	Waiting environmental compliance	2011
7 projects under study	934			after 2015

- Lower environmental restrictions
- Attractive IRRs
- Longer operation terms facilitate investment decisions
- Projects under study focused on pumping facilities

New hydro plants projects in Portugal

Power Plant	MW	Capex (€ million)	Status	Expected Entry into service
Baixo Sabor (P)	170	300	Waiting environmental compliance	2013
Foz Tua (P)	215	240	Previous information request	2014
Linhares pumping (P)	300	160	---	2015
7 projects under study	834			after 2015

- Focus on projects with limited environmental impact and high value creation
- IRRs lower than in repowering

CMECs implementation should promote edp's new hydro investments in Portugal

edp targets to build 1,094 MW of hydro until 2015, additional 1,768 MW under study

PPAs/CMECs legislation package: Conclusions



CMECs system + hydro plants in the market after end of PPAs should provide:

Cash Flow Stability until 2017

- NPV of PPAs preserved
- Lower “Cash” Gross Profit until 2010 compensated by €800m securitisation
- No impact on P&L until 2017: Reported Gross Profit in line with PPAs profile

Hydro in the market after PPAs

- operation of hydro plants in the market after PPAs until end of hydro concession
- payment due to increase of electricity price to €50/MWh (two independent valuations)
- WACC applied in line with independent merchant generators in Europe

New Hydro Projects

- CMECs approval relaunch repowering and new capacity hydro projects
- edp targets to build 1,094 MW of hydro until 2015
- additional 1,768 MW under study

Cash flow stability until 2017; long term exposure to electricity prices and renewables

Reinforces the economic conditions to build new hydro capacity in Portugal



edp

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