



Public Power Corporation SA

Business plan 2009-2014

“Repositioning for Performance and Growth”

November 18, 2008

PPC is facing financial, operational and strategic challenges.

PPC plans to undertake significant investments till 2014 in its core activities and new developing sectors to continue its growth.

PPC will exploit all opportunities for performance improvement and revenue growth, in order to have a strong competitive position in the liberalised energy market.



PPC is facing financial, operational and strategic challenges.

Sub-optimal operations

PPC's operational performance rests below the desired and attainable levels

Regulatory challenges

Differences continue to exist in the business environment between Greece and the other European countries

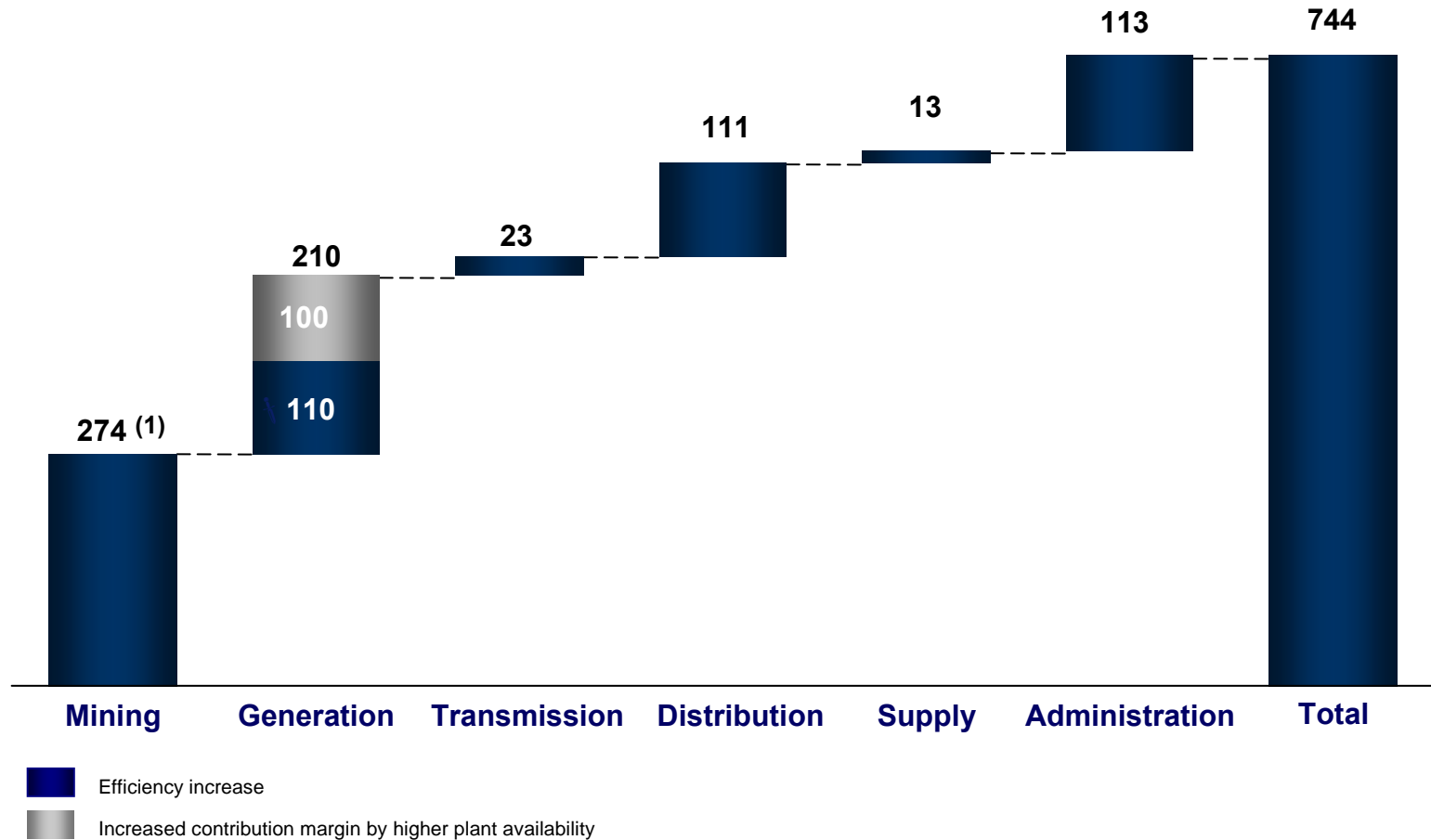
Poor financials

The financial results of PPC during the last few years are not satisfactory.



In the Strategic Plan we defined an efficiency gap of about €750 m. compared with the best practices of European electric utilities

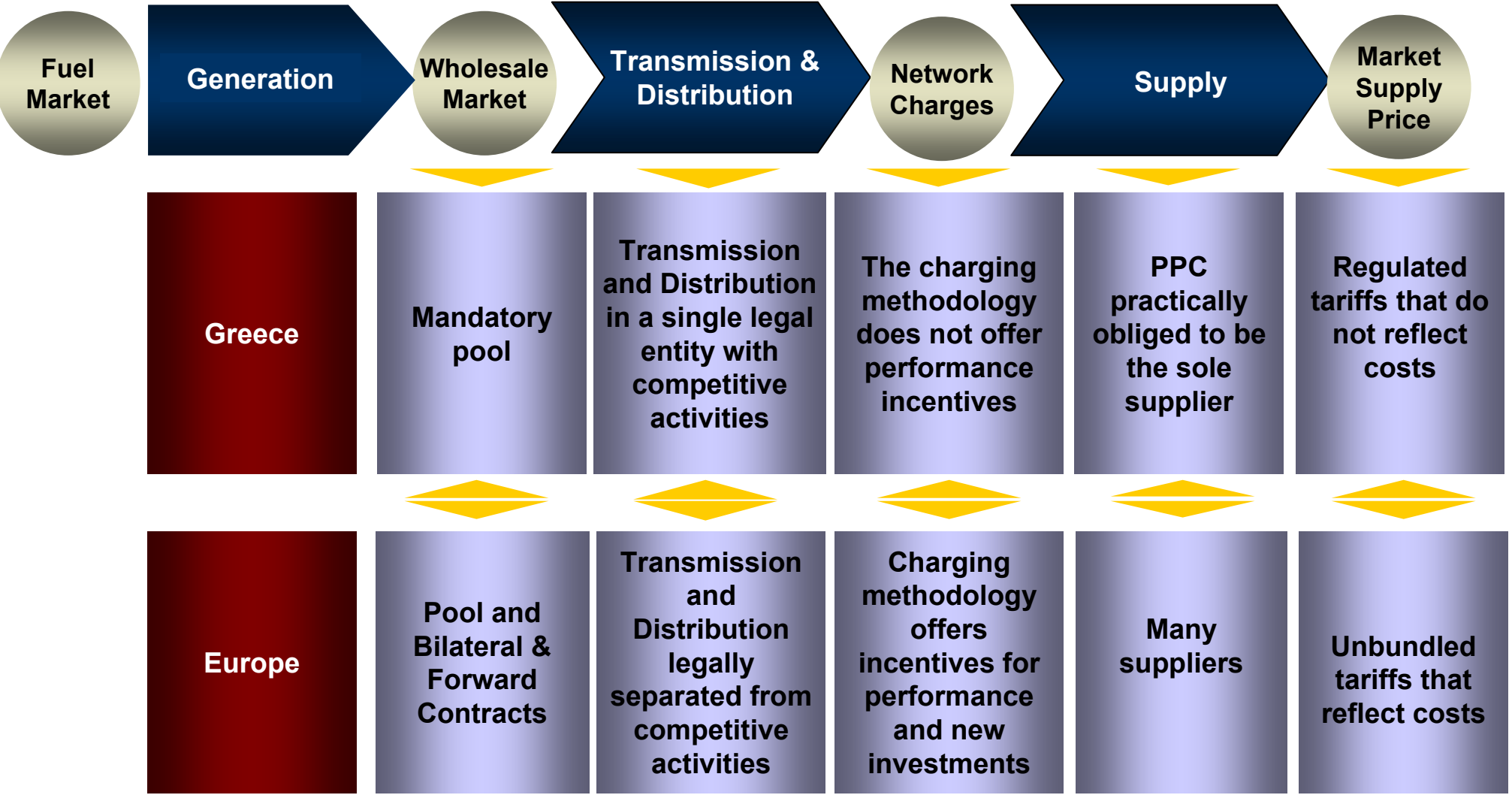
PPC has an efficiency gap of ~€750m p.a. compared to European best practices



Note(1): Lignite as compared to hard coal











The important differences that we outlined in the electricity value chain between Greece and Europe, remain today





Customer tariffs in Greece remain regulated and do not reflect costs...

Country	Industrial ⁽¹⁾	Residential ⁽¹⁾
Greece 	Regulated tariffs, without discrete charges, that do not reflect costs	Regulated tariffs, without discrete charges, that do not reflect costs
Portugal 	Market price ⁽²⁾ or tariff with securitization of tariff deficit	Market price ⁽²⁾ or tariff with securitization of tariff deficit
Spain 	Market price ⁽²⁾ or tariff ⁽³⁾ reflecting costs	Market price ⁽²⁾ or tariff ⁽³⁾ reflecting costs
France 	Market price ⁽²⁾	
Belgium 	Market price ⁽²⁾	
Ireland 	Market price ⁽²⁾	
Italy 	Market price ⁽²⁾	Market price ⁽²⁾
United Kingdom 	Market price ⁽²⁾	

Notes ⁽¹⁾: Country overview – differences may apply

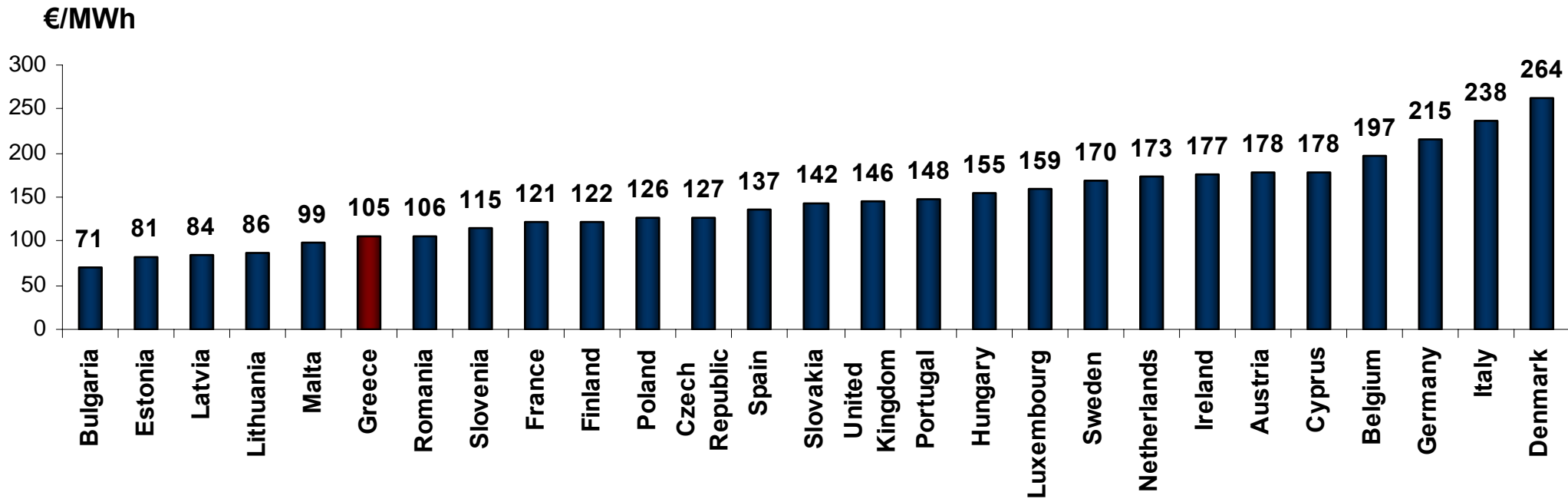
⁽²⁾: the market price is set by the market

⁽³⁾: regulated tariff



... resulting in the lowest electricity prices for households in EU15 and one of the lowest in EU27

Electricity tariffs with taxes and PSOs for households with annual consumption 2500 to 5000 kWh (1st half 2008)

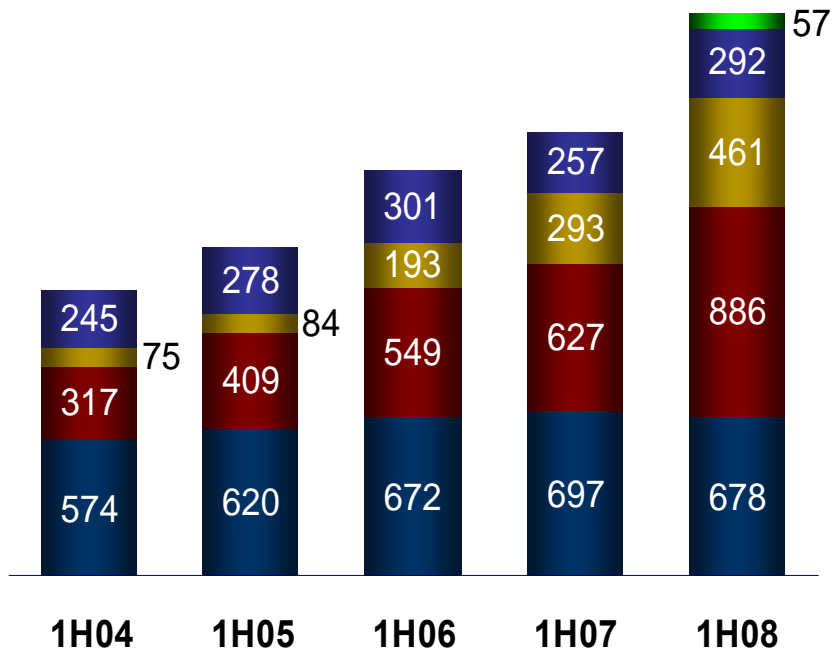


Source: Eurostat



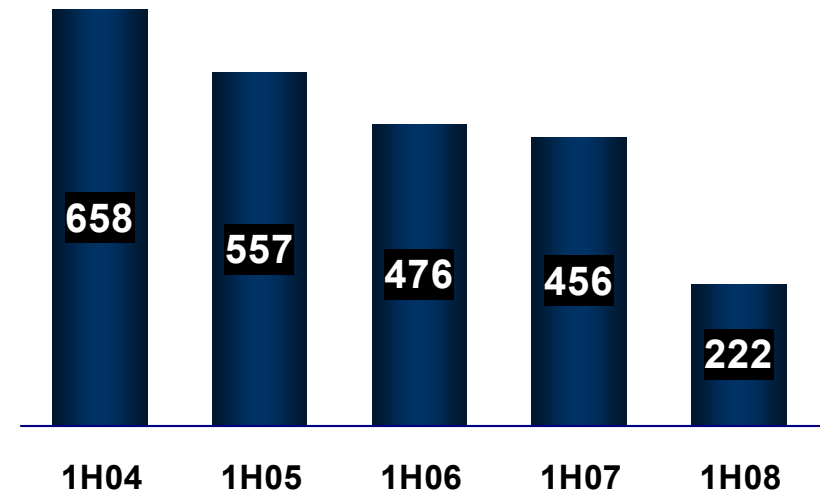
The non-controllable operational expenses (fuel, energy purchases and CO2 cost) increased drastically during the last five years affecting significantly the profitability

Evolution of operational expenses (€m)



- Payroll
- Liquid fuel and natural gas
- Energy purchases
- Other operational expenses
- CO2 cost

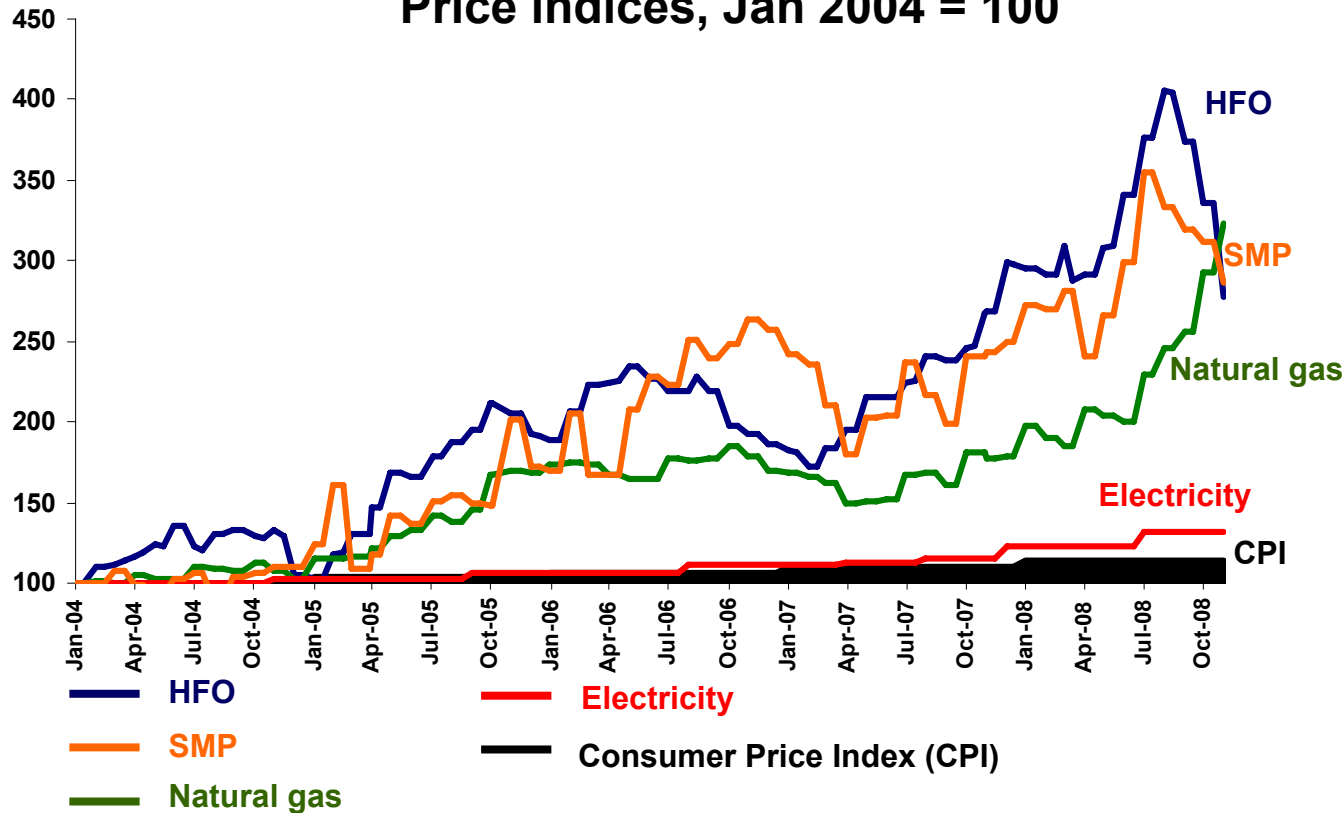
Evolution of EBITDA (€ m)





The approved tariff increases barely covered inflation

Price indices, Jan 2004 = 100



Regulatory issues to be addressed

Tariffs with discrete charges (cost of energy, network charges, PSO)

Social tariff

Supplier of last resort

Rules of the wholesale market

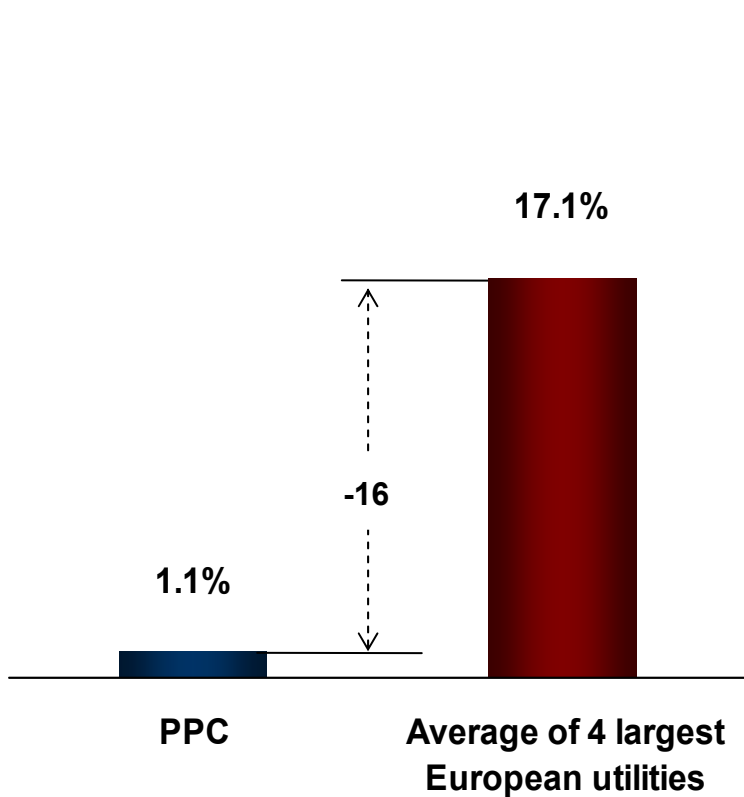
Ancillary services

PPC has submitted proposals to regulatory authorities on the pending regulatory issues

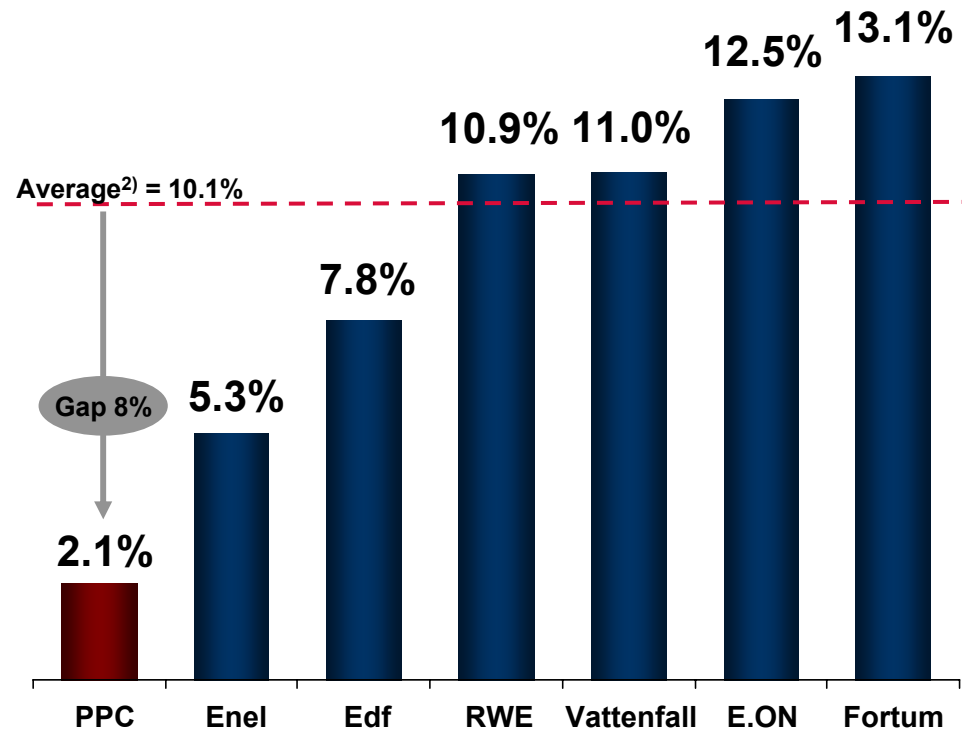


PPC's return on capital employed is considerably below other incumbent utilities

ROE 2007 (%)



PPC Return on Capital Employed 2007 in %¹⁾



Note:

- 1) ROE = Net profit / Shareholders equity
 - 2) 4 largest European utilities by market capitalization: RWE, E.ON, Edf, ENEL
 - 3) With one off revenue from Tellas, ROE for PPC is 4.2%
- Source: JCF Factset Analyst Consensus

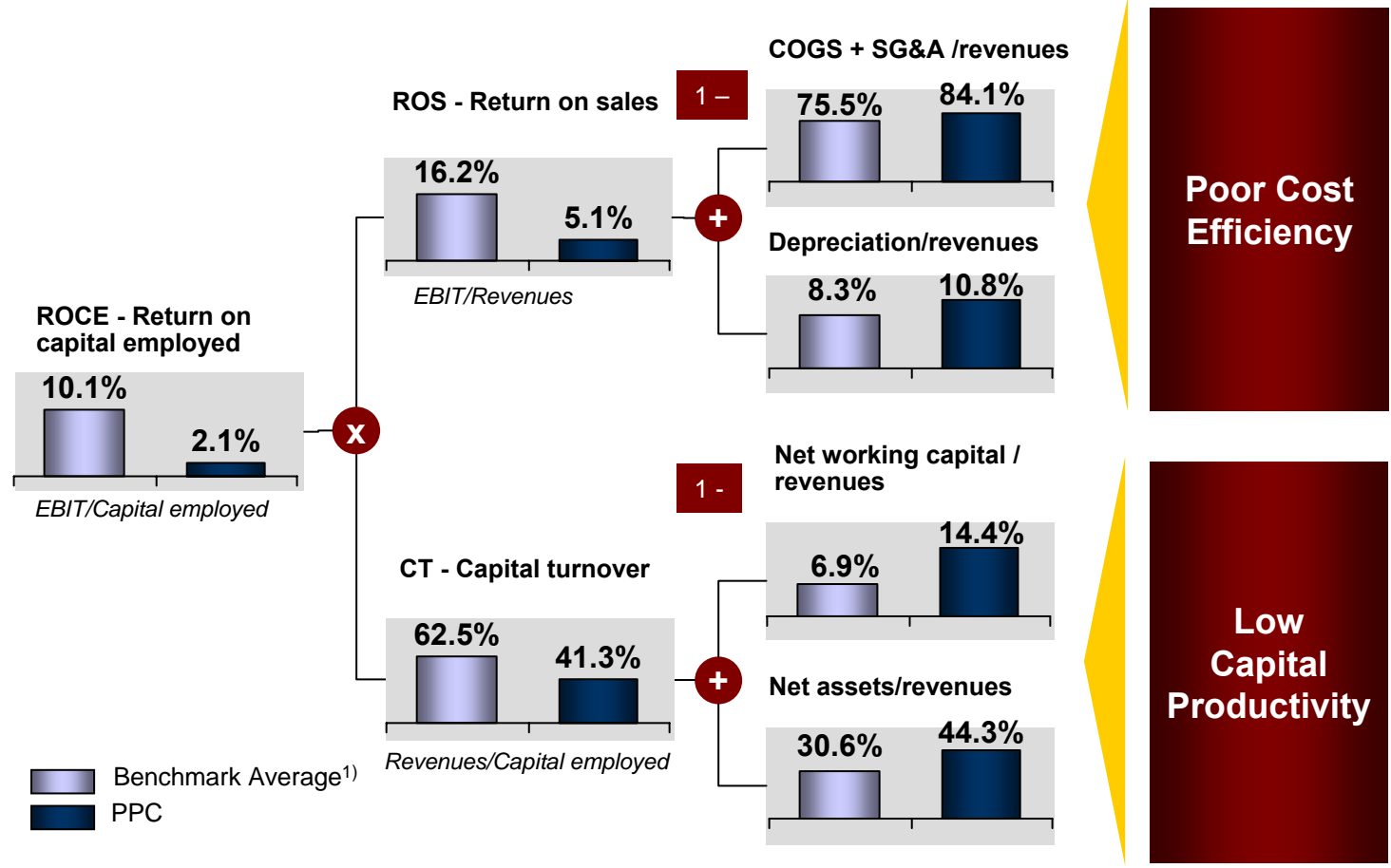
Note:

- 1) ROCE = EBIT / Invested Capital, Bloomberg's methodology to calculate ROCE might differ slightly from PPC's method
 - 2) Companies included: E.ON, RWE, Enel, Edf and Fortum - weighted according to their market capitalization
- Source: Bloomberg, Booz&Co. Analysis



Major performance issues remain

ROCE tree comparison: PPC vs. five EU companies, 2007 in %



Poor Cost Efficiency

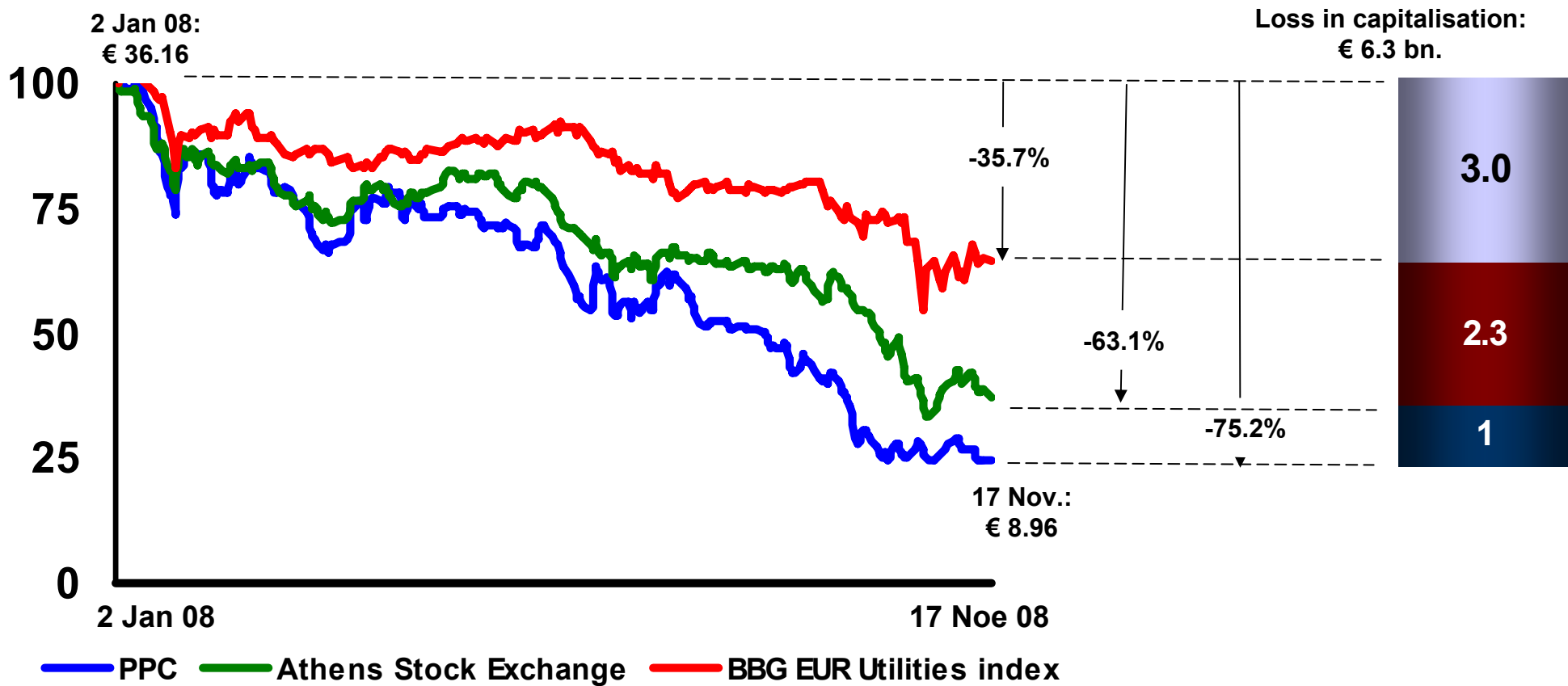
Low Capital Productivity

1) Companies included: E.ON, RWE, Enel, Edf and Fortum
 - weighted according to their market capitalization
 Source: Bloomberg, Booz&Co. Analysis



PPC stock price moved lower than the European utilities index and the Athens Stock Exchange index, resulting in a loss in capitalisation of € 6.3 bn.

Stock index, base Jan 2 2008=100
[Capitalization 2 Jan 08 = €8.4 bn, 11 Nov 08 = €2.1 bn]



PPC is facing financial, operational and strategic challenges.

PPC plans to undertake significant investments till 2014 in its core activities and new developing sectors to continue its growth.

PPC will exploit all opportunities for performance improvement and revenue growth, in order to have a strong competitive position in the liberalised energy market.



PPC aims to become an efficient and competitive electric utility in the liberalised energy market

Objectives

Efficient power plant portfolio, respecting the environment

Build new plants with best available technology

Decommission old, inefficient and polluting power plants

Accelerate completion of large hydro projects

Improved service to our customers

Increase network reliability

Improve efficiency of network

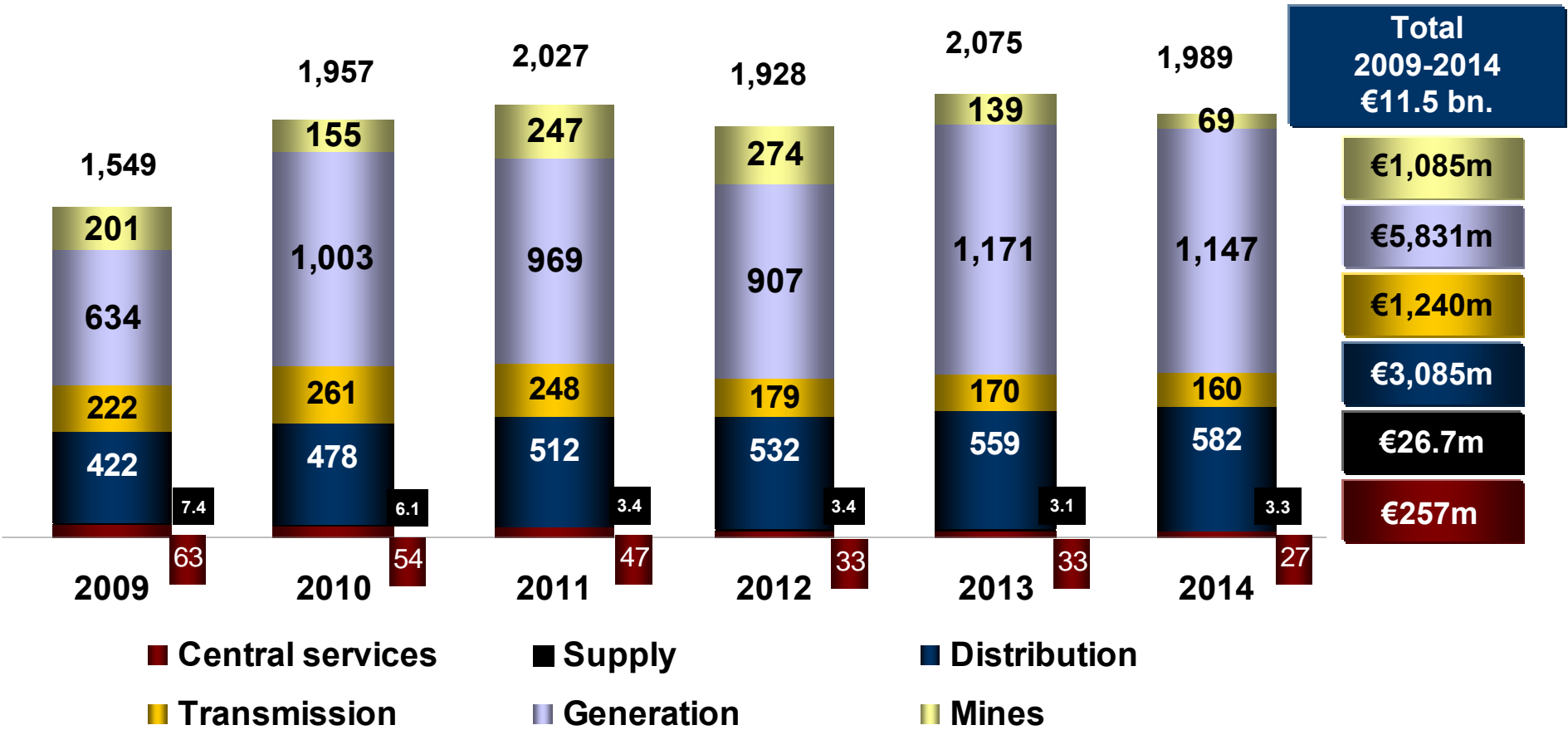
Achieve 20% market share in Renewable Energy Sources

Active in all sectors: wind, solar, small hydro, geothermal



PPC company investment plan is c.€11.5 bn.

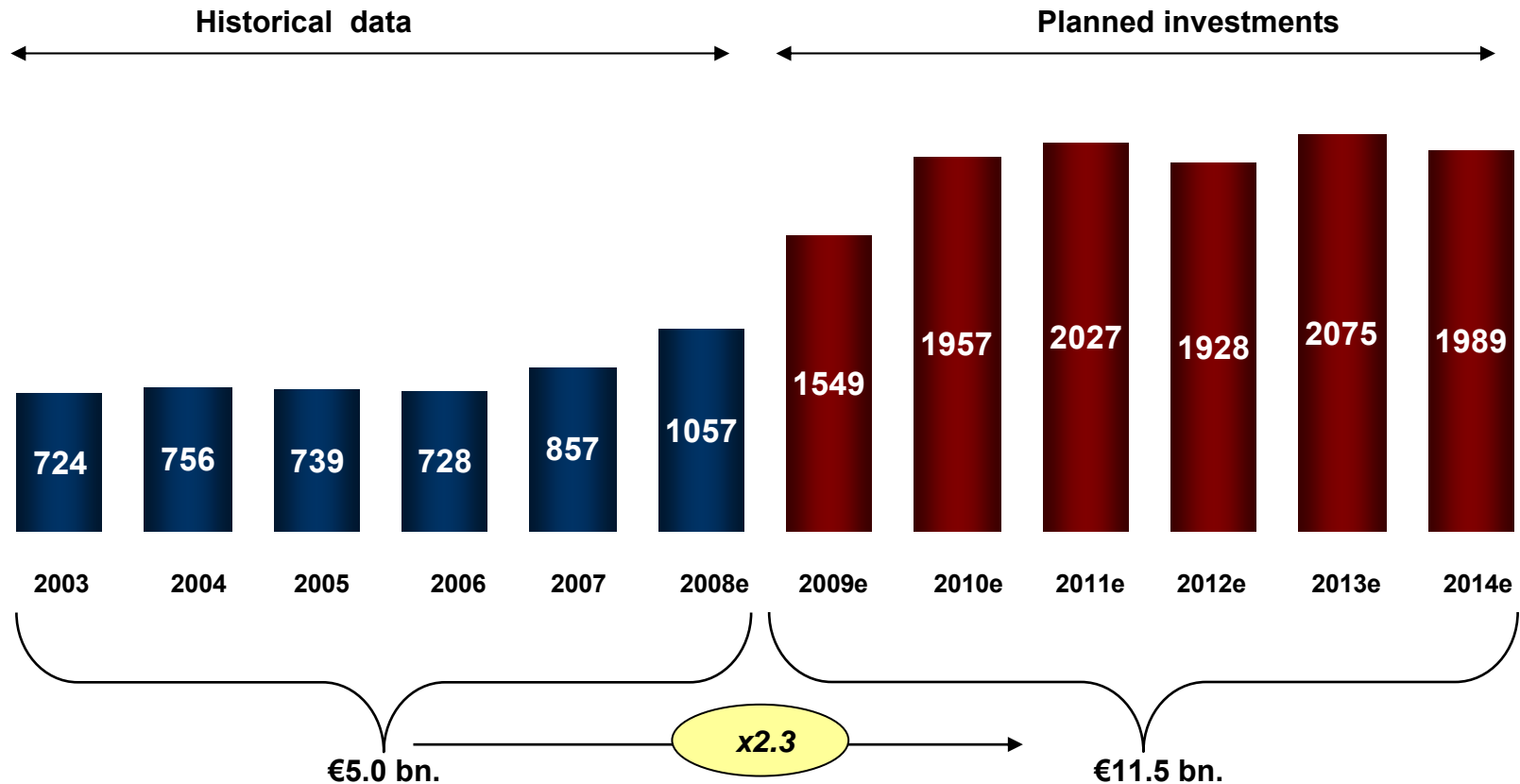
Investment plan 2009-2014 (€ mil. nominal values)





The execution of an investment plan of such magnitude is a challenge for PPC

PPC investments 2003-2008 and planned investments 2009-2014 (€ m – nominal values)





PPC Generation investment plan: new power plants and decommissioning of old, inefficient plants

1 Thermal plants: 3,887 MW

Power Station	Fuel	Installed Capacity (MW)	Commissioning year
Komotini	Natural gas	160	2009
Aliveri V	Natural gas	427	2010
Megalopoli V	Natural gas	800	2012
Florina II	Lignite	450	2013
Ptolemaida V	Lignite	450	2014
Aliveri VI ⁽¹⁾	Hard-coal	800	2014
Larimna I ⁽¹⁾	Hard-coal	800	2015

2 Hydro plants: 640 MW

Power Station	Installed Capacity (MW)	Commissioning Year
Mesohora I,II	160	2009
Illarionas I,II	157	2010
Metsovitiko II	29	2010
Sykia I,II ⁽²⁾	125	2013
Pefkofito I,II ⁽²⁾	160	2013

3 Decommissioning Old plants: 2,400 MW

Fuel	Capacity (MW)
Lignite (Ptolemaida I,II,III, IV,Liptol I,II, Megalopoli I,II)	913
Natural gas (Agios Georgios VIII, IX, Lavrio III)	540
HFO (Lavrio I,II, Aliveri III, IV)	750
Diesel and HFO in Cyclades islands	200

4 Islands : new units 990MW – Cyclades connection

Islands	Fuel	Capacity (MW)
Crete	LNG	500+70
Rhodes	Oil-fired	120
Lesvos	Oil-fired	120
Various small islands	Oil-fired	180

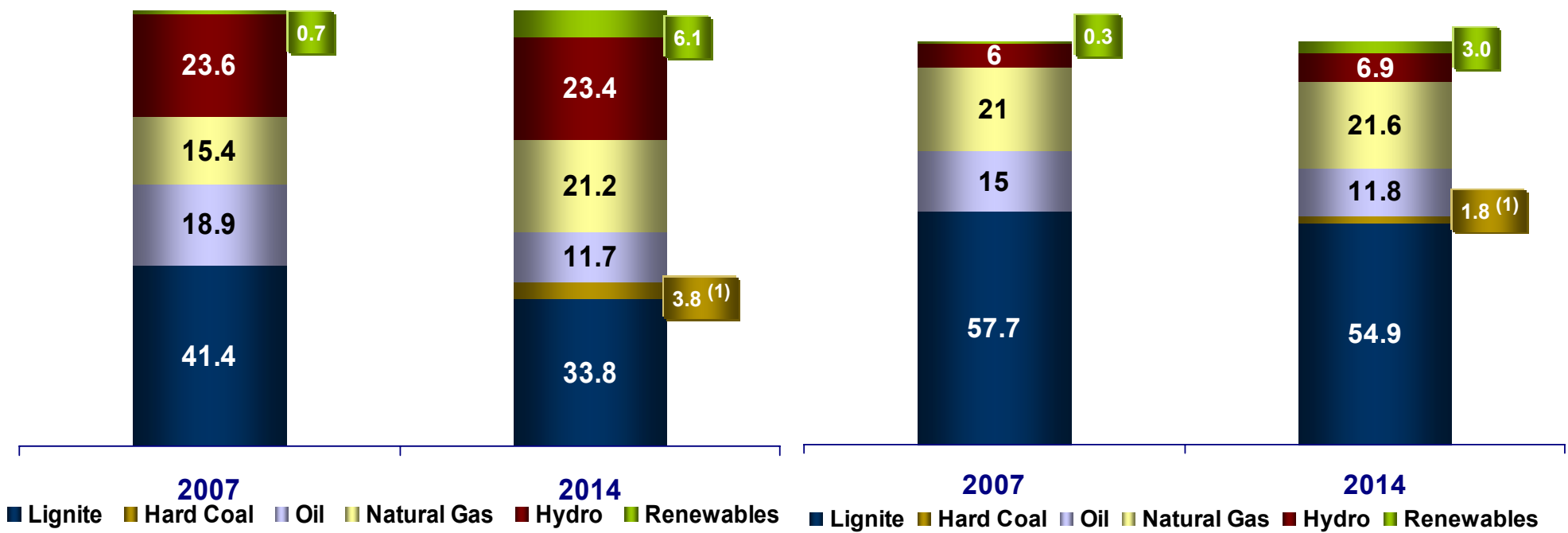
Cyclades connection



PPC's power plant portfolio in 2014 will ensure reliability, higher efficiency and a decrease of generation costs

Installed Capacity (%)

Electricity Generation (%)

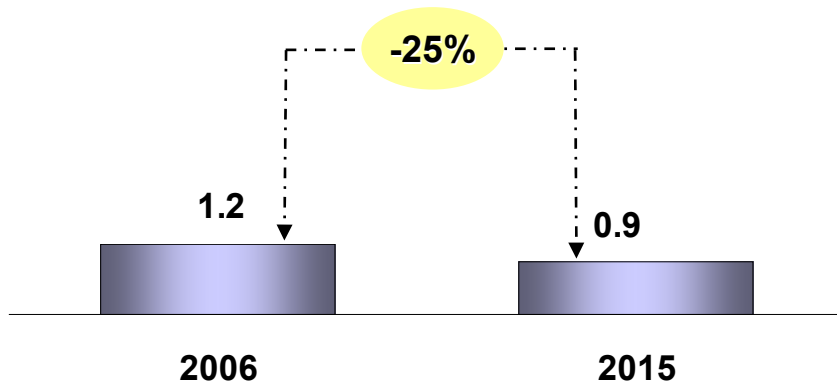


(1) Aliveri VI and Ptolemaida V will start operating in September and November 2014 respectively

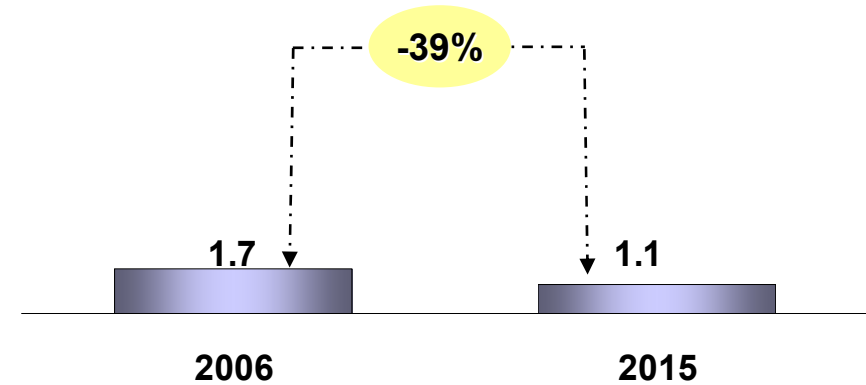


After the completion of the generation program both CO₂ and conventional emissions decrease

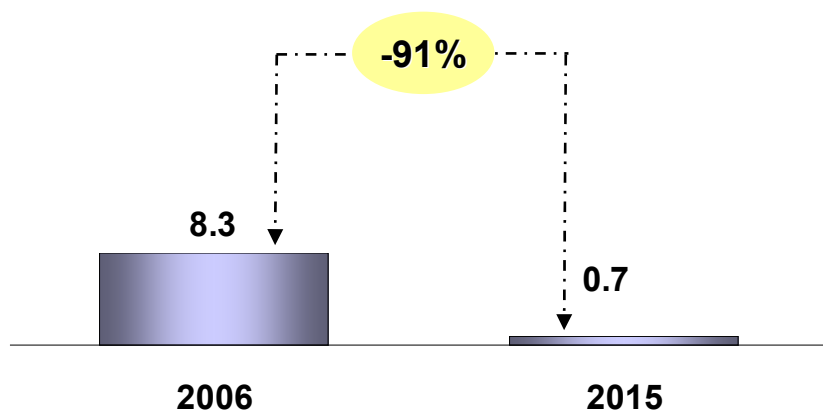
CO₂ in interconnected (kg/kWh)



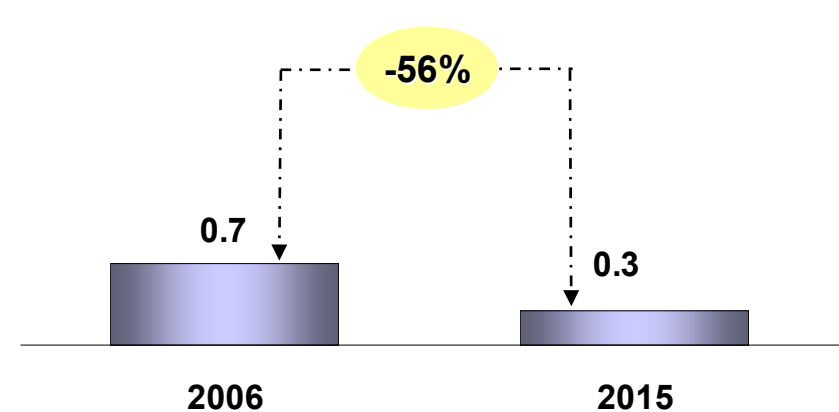
NO_x in interconnected (g/kWh)



SO₂ in interconnected (g/kWh)



PM in interconnected (g/kWh)

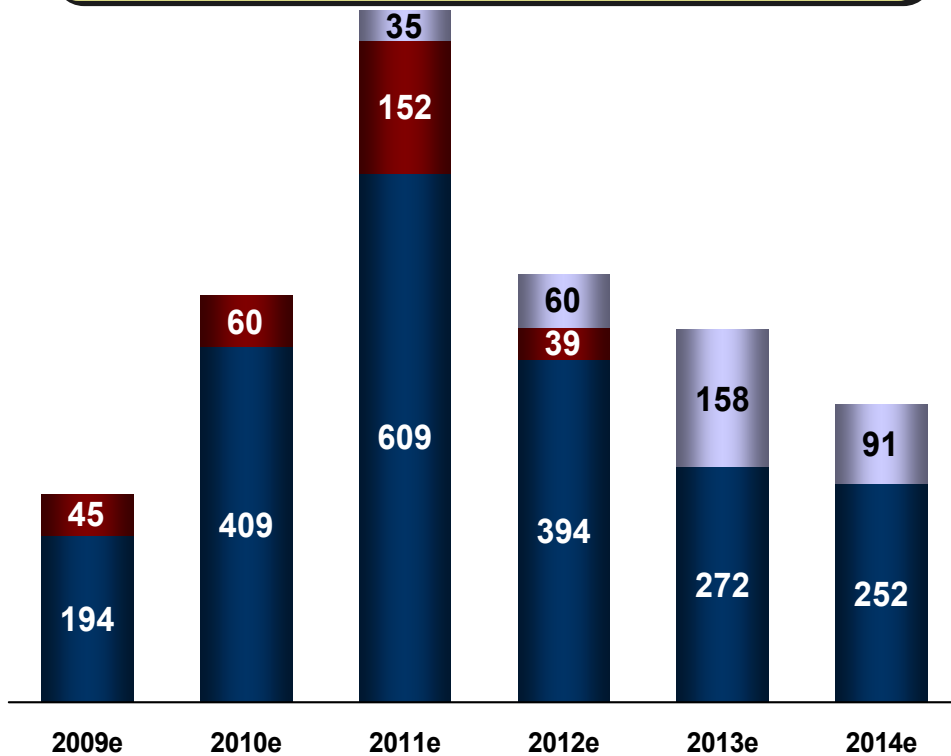




PPC Subsidiaries and Joint Ventures : €2.8 bn to further propel growth

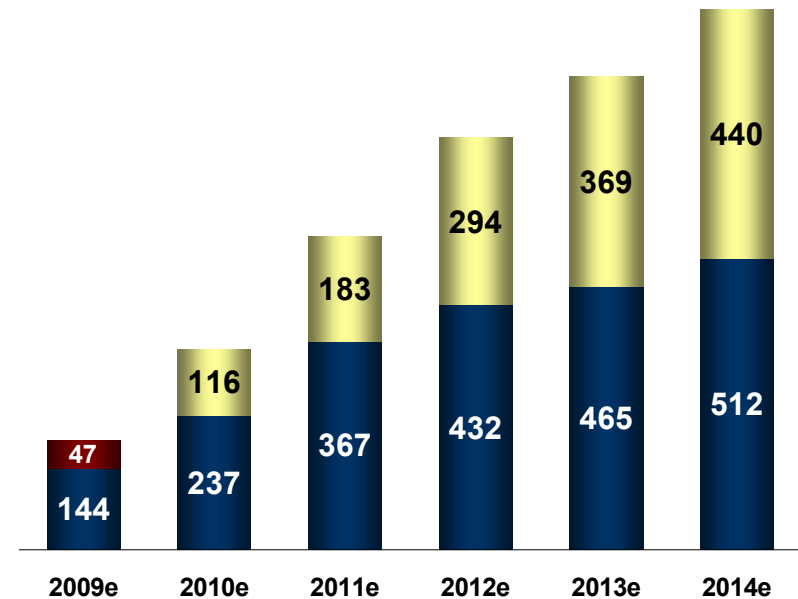
Investments of subsidiaries and contributions in joint ventures (€ m)

Total 2009-2014 €2.8 bn.



PPC Renewables investment plan 2009-2014, €2.1 bn.
Evolution of installed capacity, MW

950 MW in RES till 2014



■ PPC Renewables ■ MoU Halyvourgiki ■ MoU RWE

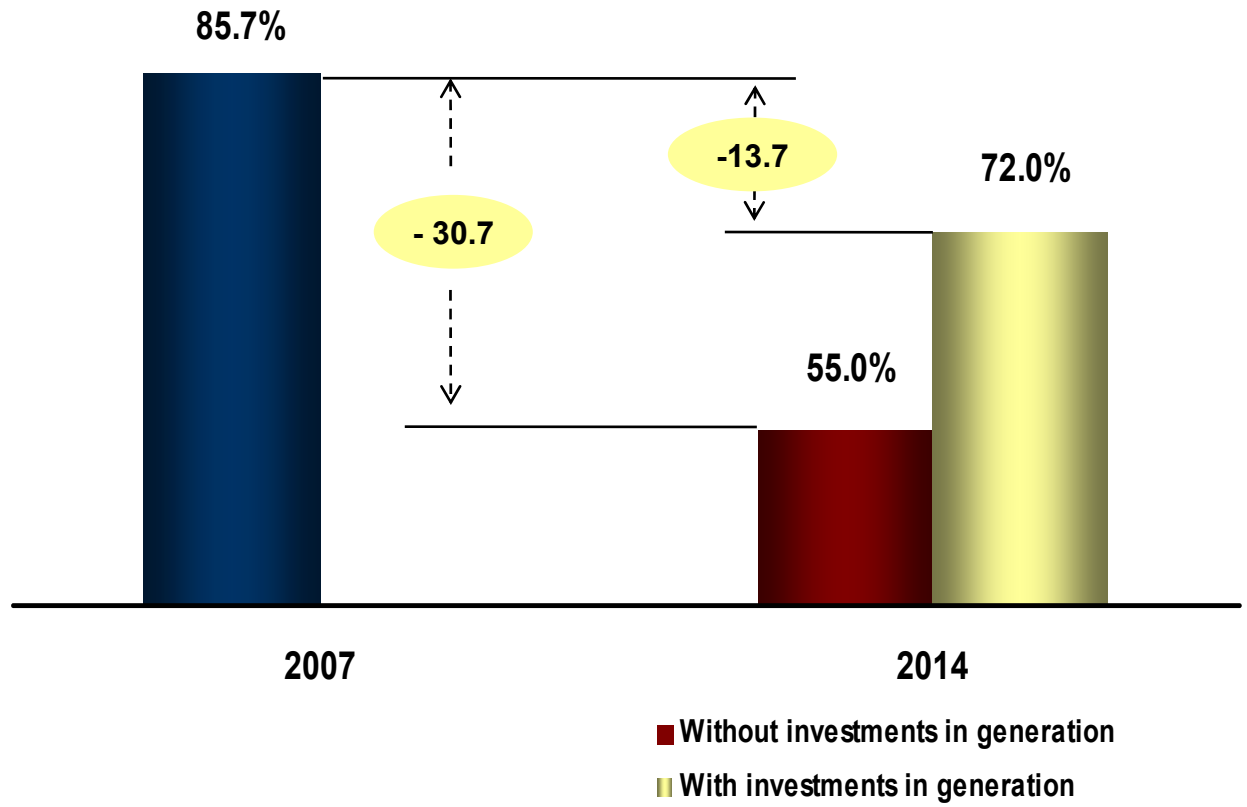
■ Planned ■ Not identified ■ In negotiations

Note:
PPC Renewables will invest via joint ventures with other parties. PPC Renewables contribution in the joint ventures will be around 50% (€ 1,05 bn)
SENCAP is not included.



Clear choice : Without new investments in power plants and RES, the share of PPC generation in the wholesale market will decline significantly

PPC Generation share in the wholesale market with and without investments (%)



PPC is facing financial, operational and strategic challenges.

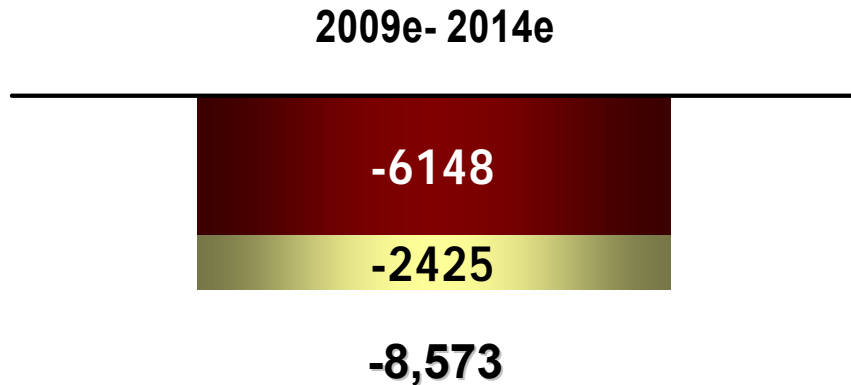
PPC plans to undertake significant investments till 2014 in its core activities and new developing sectors to continue its growth

PPC will exploit all opportunities for performance improvement and revenue growth, in order to have a strong competitive position in the liberalised energy market.

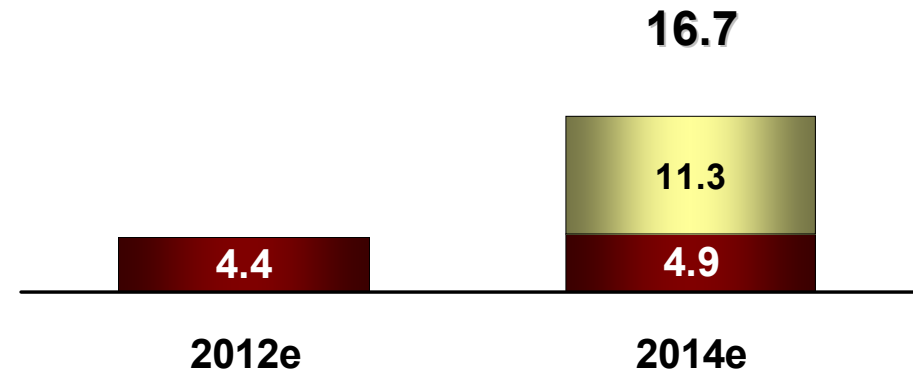


With current financials, PPC cannot implement its investment plan

Projection of Free Cash Flow for PPC (€m, after proposed investment plan)



Net Debt / EBITDA



-  Free CO2 allowances in 2013 and 2014 as in 2012
-  No free CO2 allowances in 2013 and 2014



Business Plan : Pulling all performance levers across PPC, addressing operating costs and revenue potential to realise planned investments.

Investments

Revised
Investment
plan
€13.5 bn.

Expenses

Reduction in
controllable costs in
the areas of:
-Personnel
-Materials
-External Services

Revenues

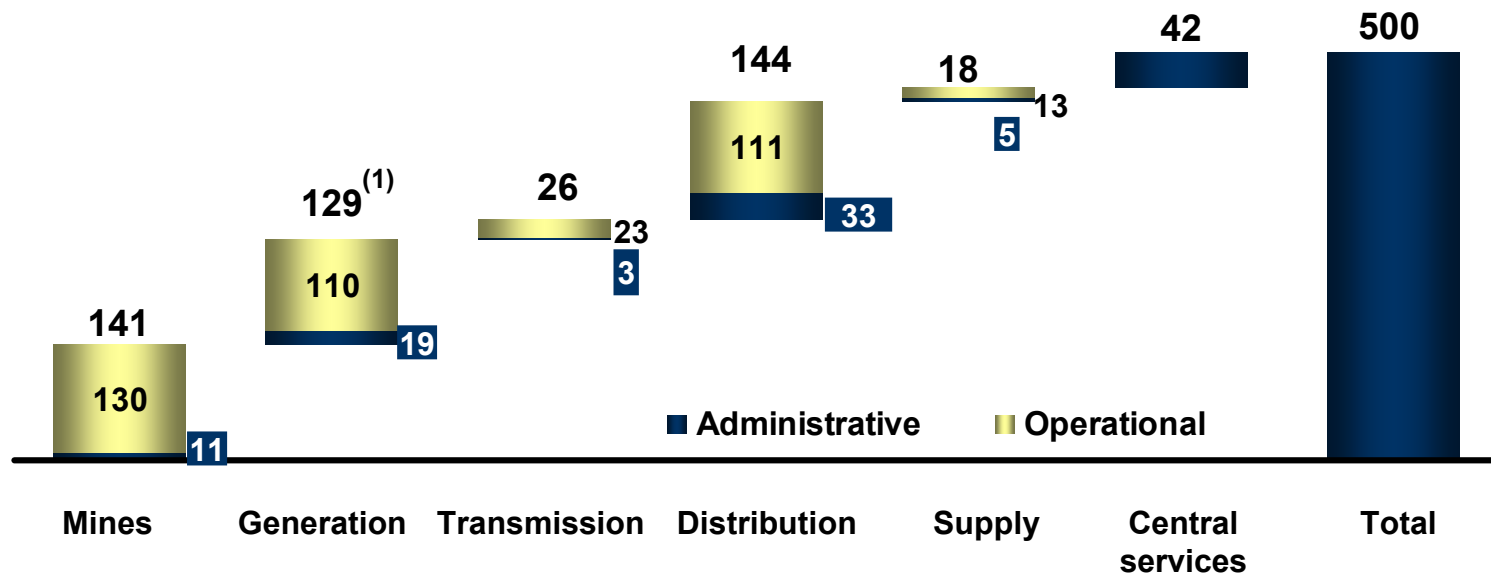
Required
revenue
increase to
support
investment
plan

CO2 base case assumption: Free allowances in 2013 and 2014, as in 2012



Targets are set for efficiency improvement with gradual reduction for PPC to €500 m annually by 2014

Targets for efficiency improvements (2008 prices)

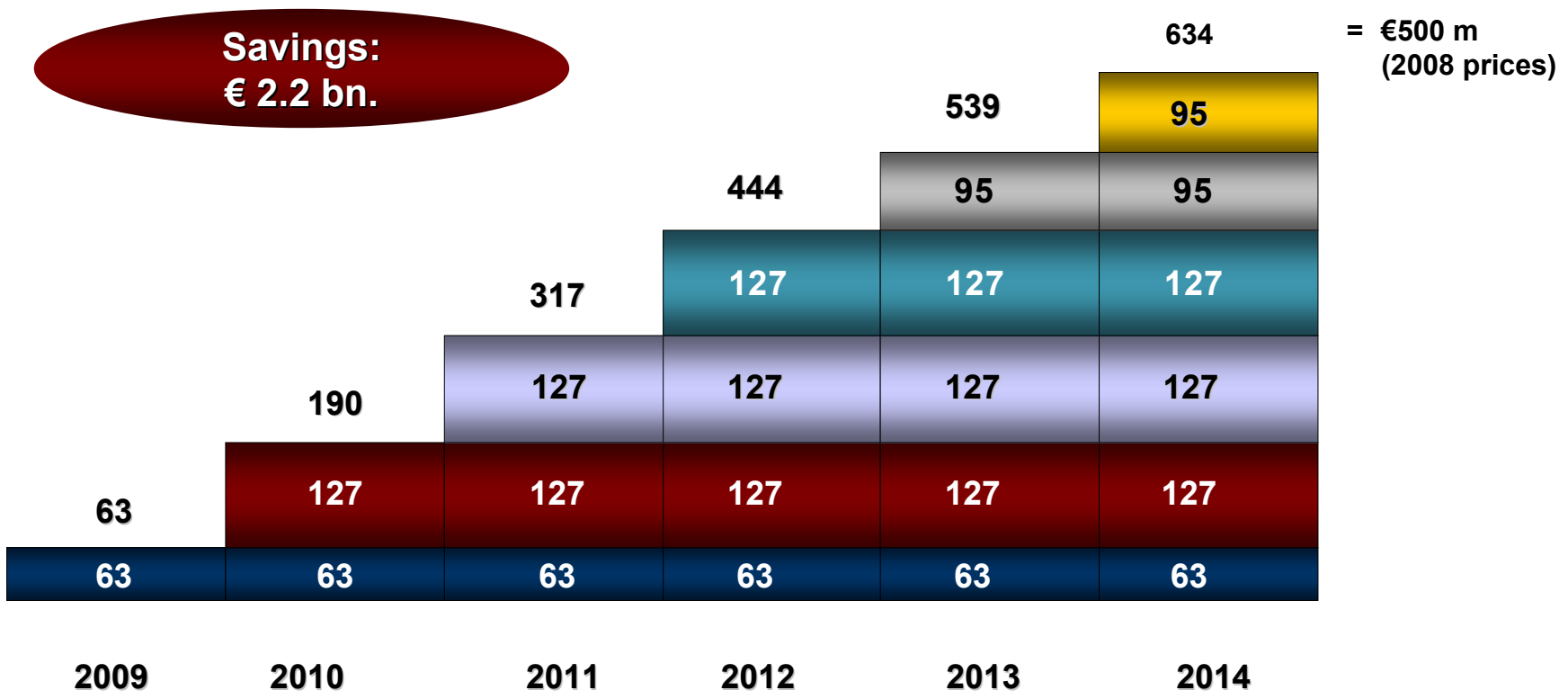


Note 1): €100 mil more from increased power plant availability



A comprehensive operational improvement program will deliver gradually € 500 m annually by 2014

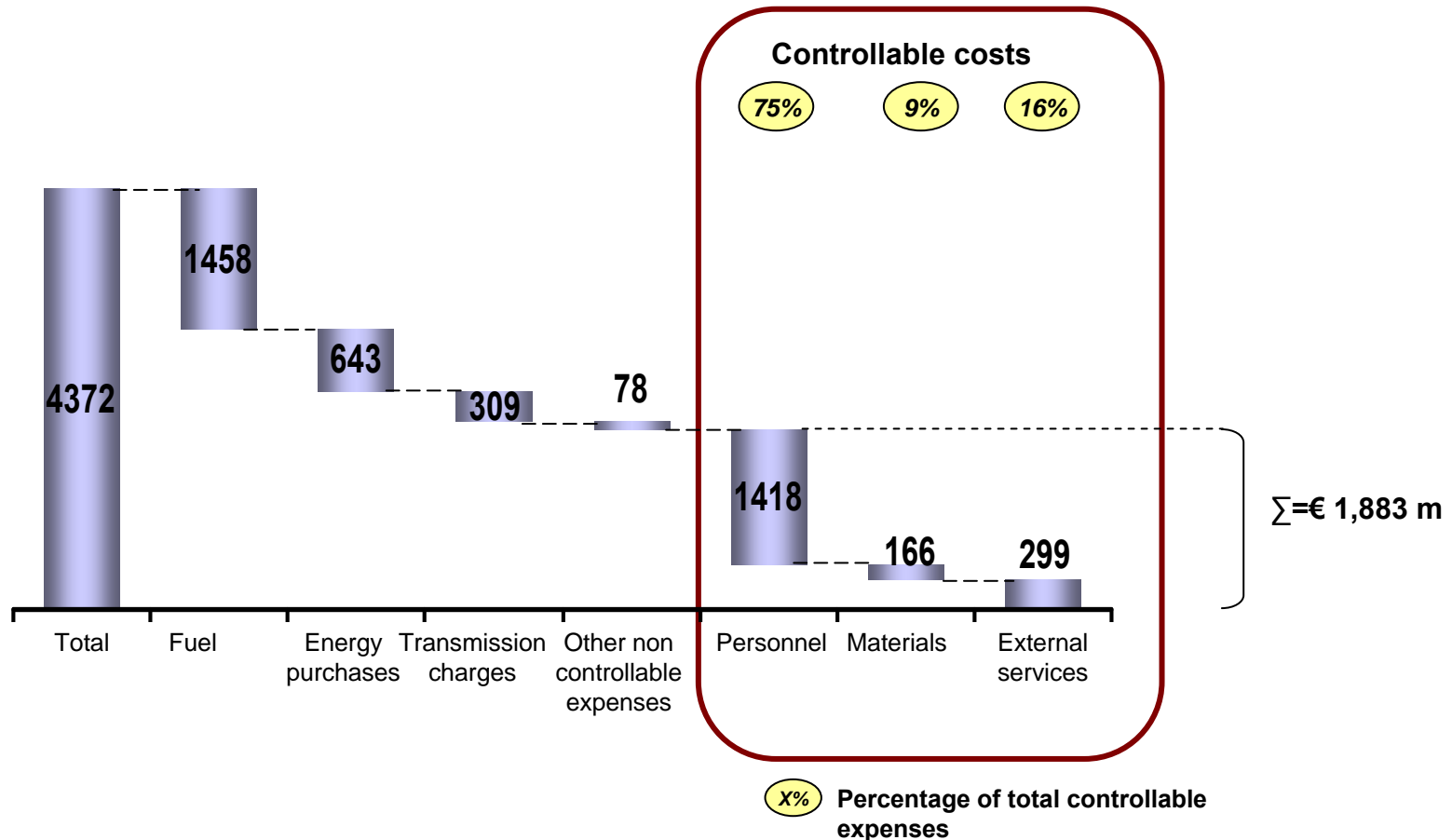
Efficiency improvement (in € m, in nominal prices)





Operational improvements can only address controllable costs – the majority of which are personnel costs

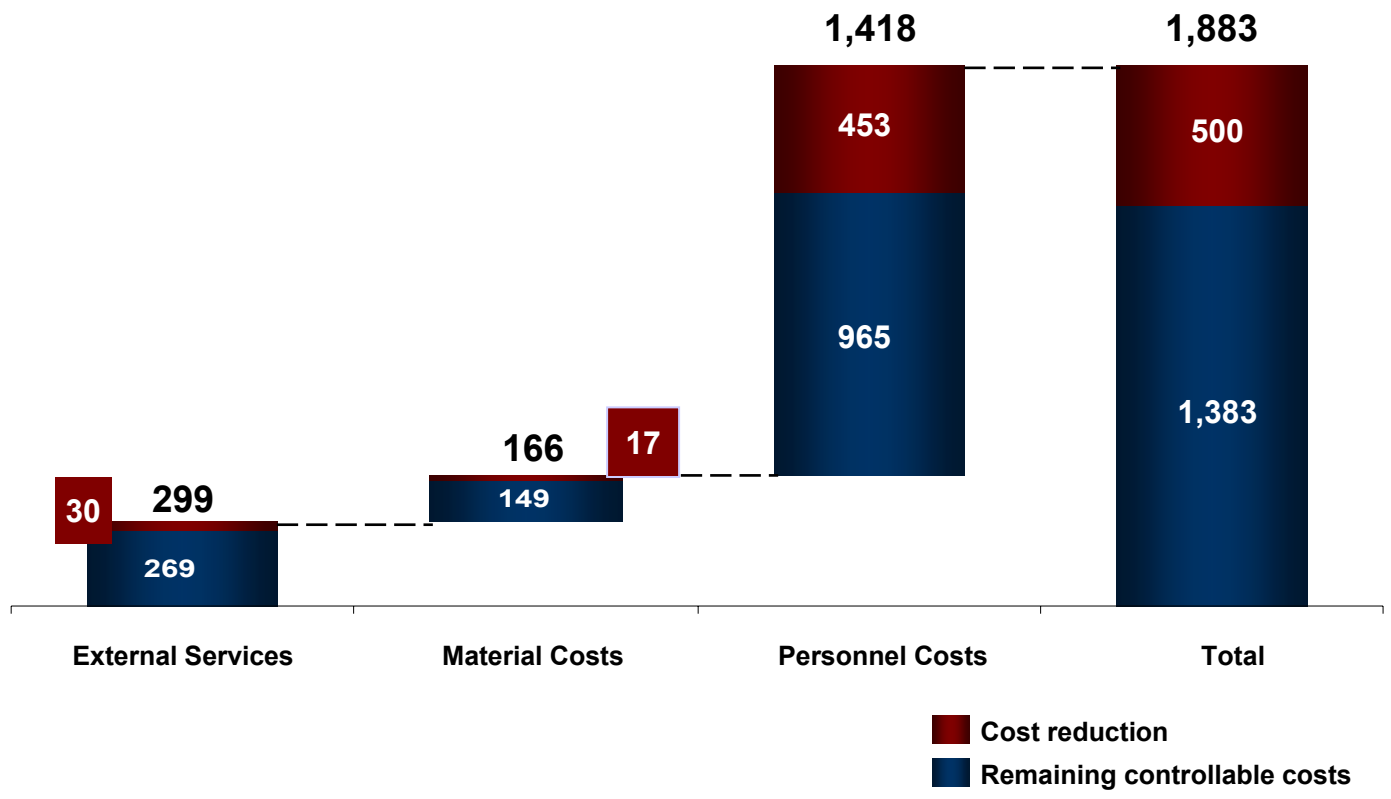
Cost basis 2007 (€ m)





The majority of savings needs to come from personnel costs

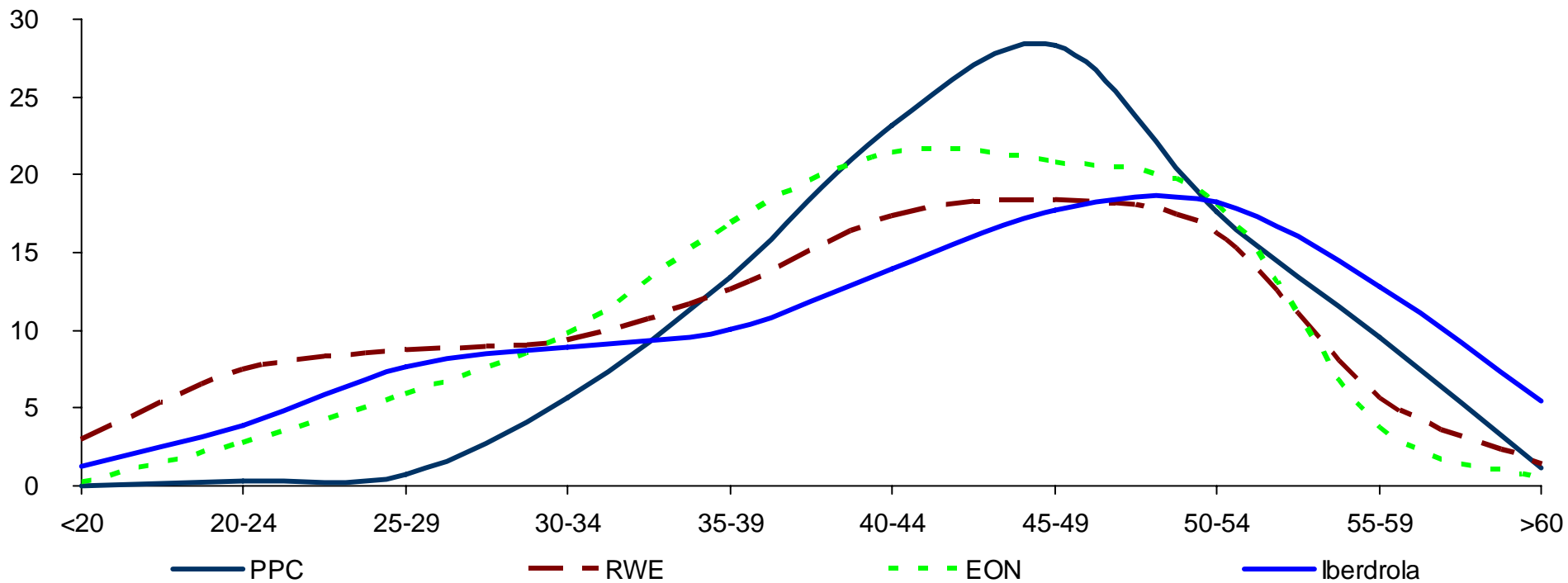
Efficiency target (€ m – 2007 basis)





Personnel age distribution is skewed towards higher age groups

Benchmarking against European utilities

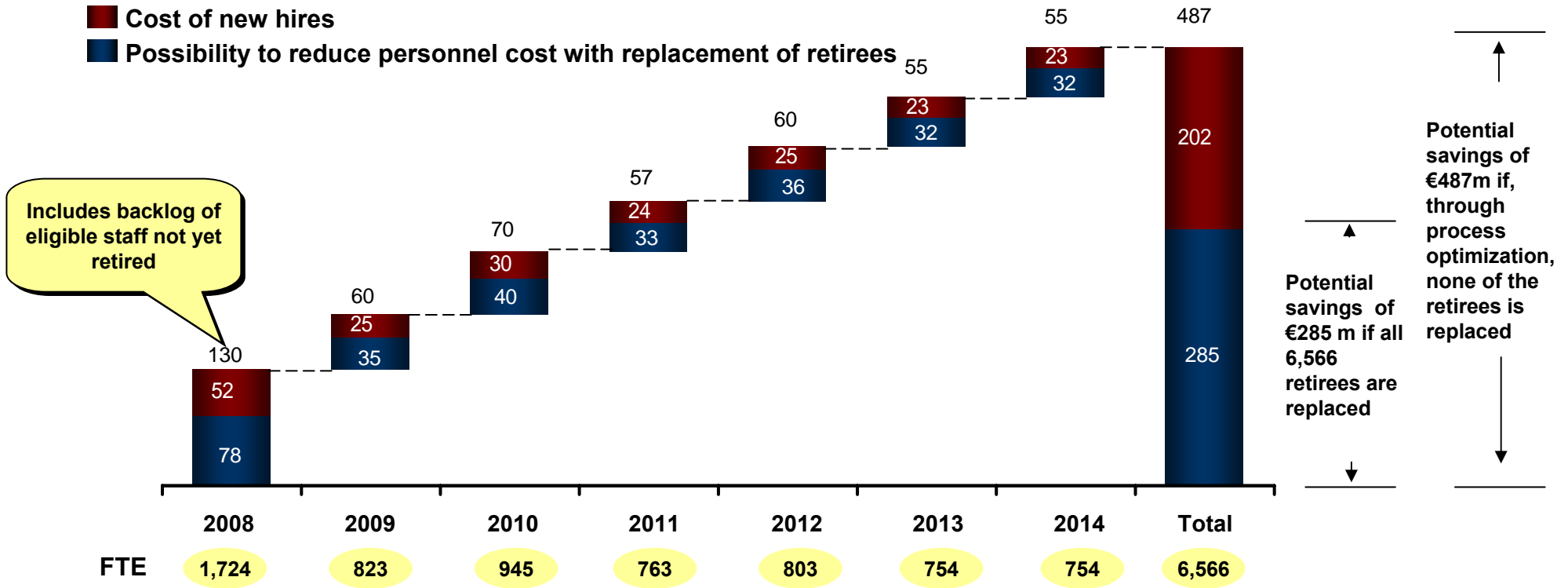


Source: Booz & Company



Reducing personnel cost is feasible...

Potential significant savings from retirements (€ m – 2008 prices)



Assumption : Retirees are replaced by new employees 21-30 years old with same educational background

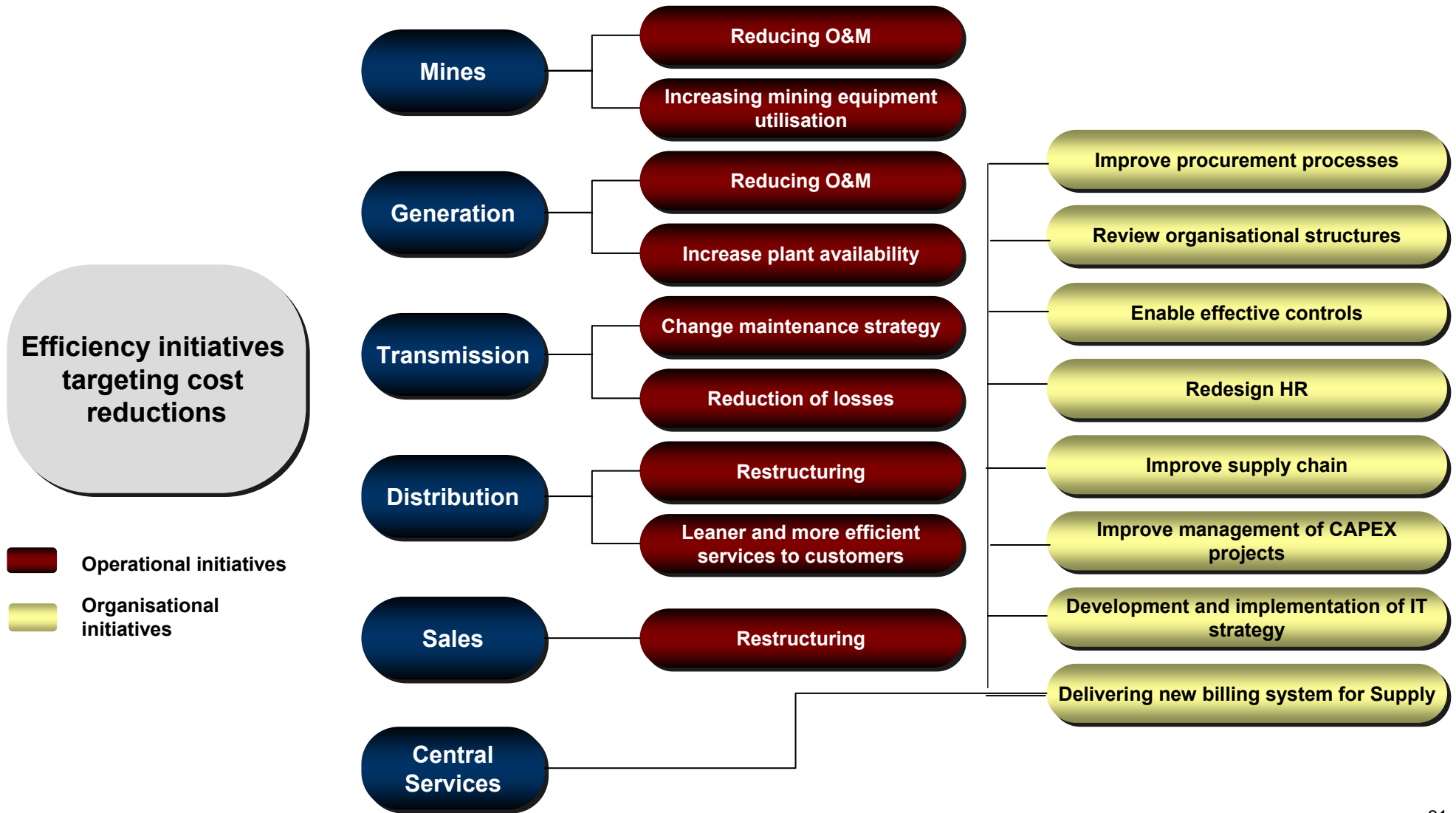


PPC will achieve the required decreases in personnel costs through the following actions:





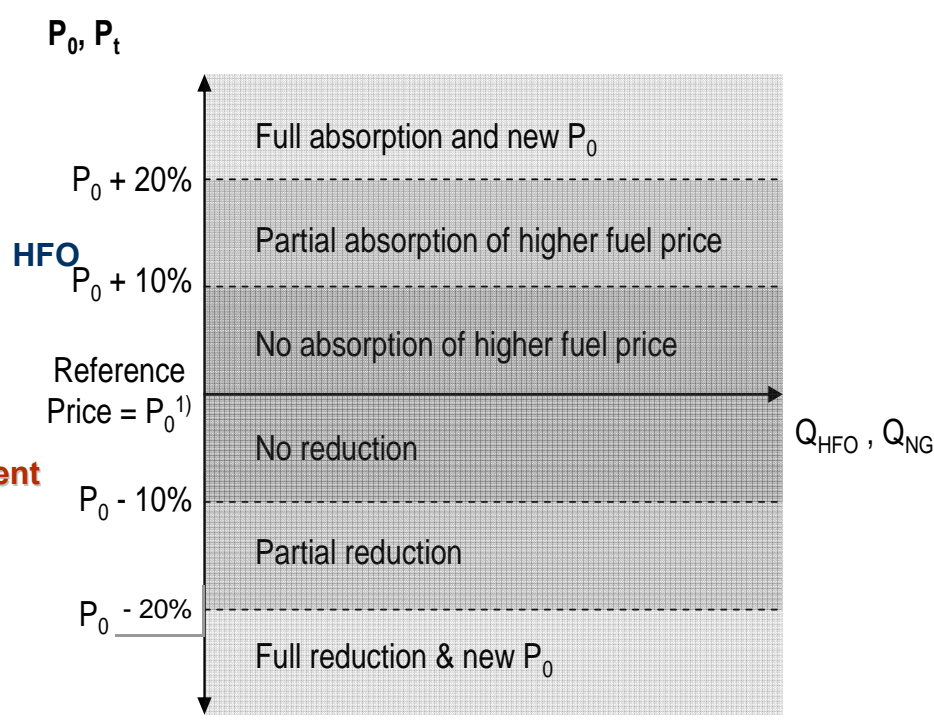
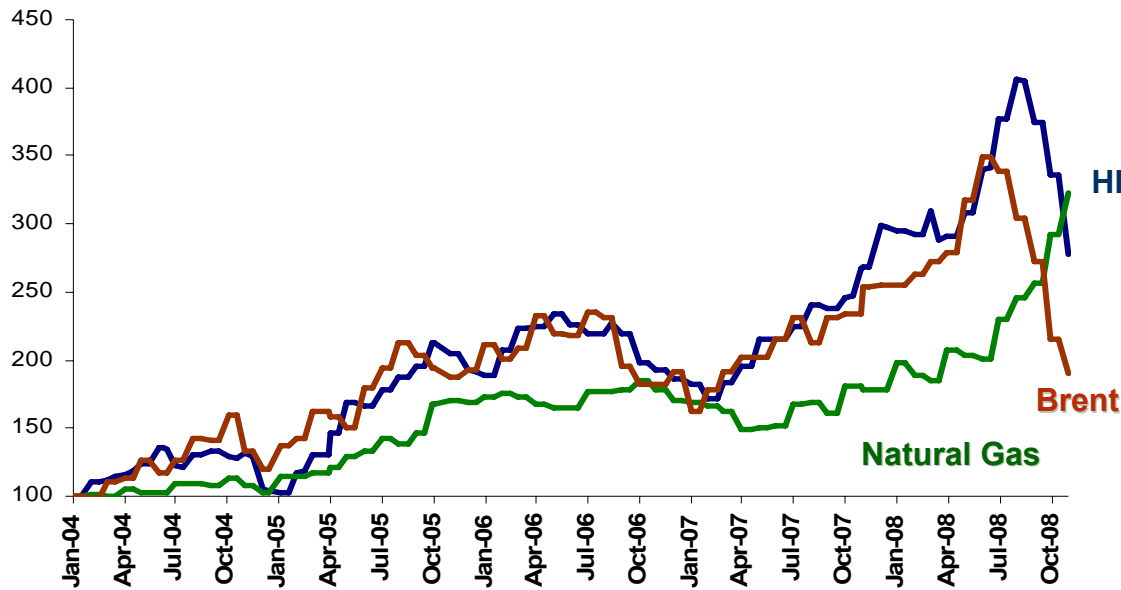
Operational and Organisational initiatives that will result in a decrease in controllable costs





Fuel adjustment mechanism

Indices (derived from prices in €)

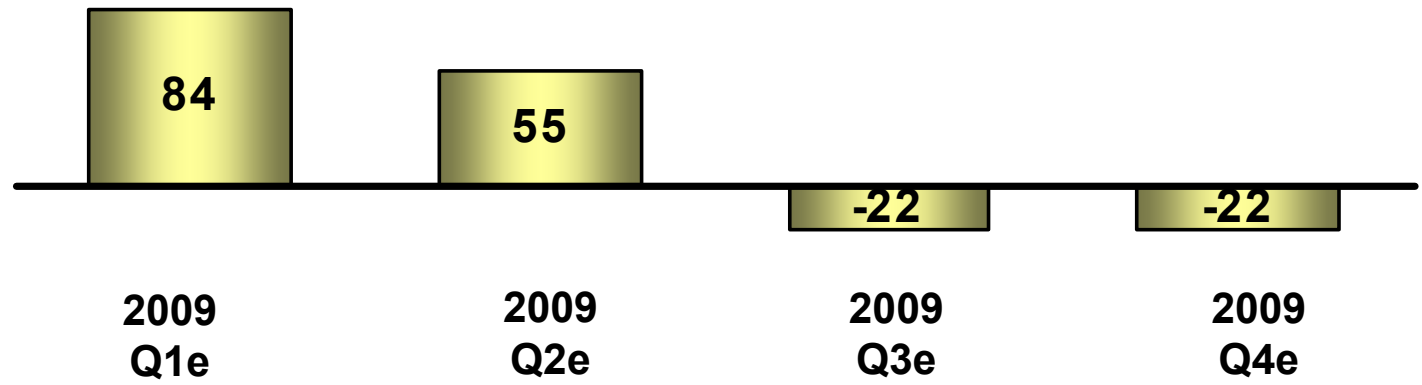


The formula takes into account HFO and natural gas prices.



Impact of fuel adjustment mechanism in 2009 (€ m)

PPC estimate of fuel adjustment mechanism impact in 2009 (€ m)



	2009 Q1e	2009 Q2e	2009 Q3e	2009 Q4e
Average fuel clause impact on customers bills	5.6%	-1.69%	-5.05%	0%

Change over previous quarter



Impact of Public Service Obligations on revenues

PSOs mechanism

1. Due to:

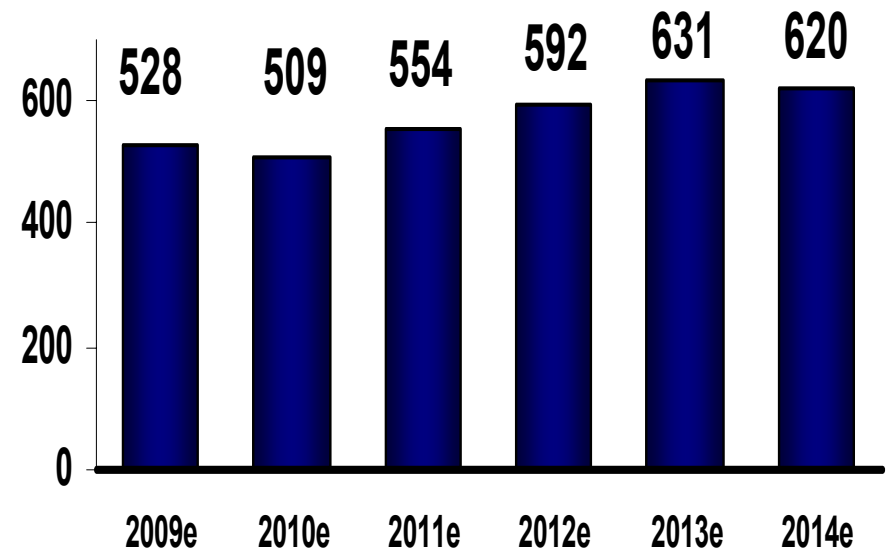
- Uniform tariffs in Greece applying also to non-interconnected islands
- Special tariff for large families

2. Based on

- the difference of the cost for generating electricity in the islands vs the mainland.

3. PSOs revenues are based on previous year's costs

PPC estimate of PSOs (€m)





PPC would propose tariff increases by a total of 5% above inflation over the six year period

Proposed tariff increases (%)

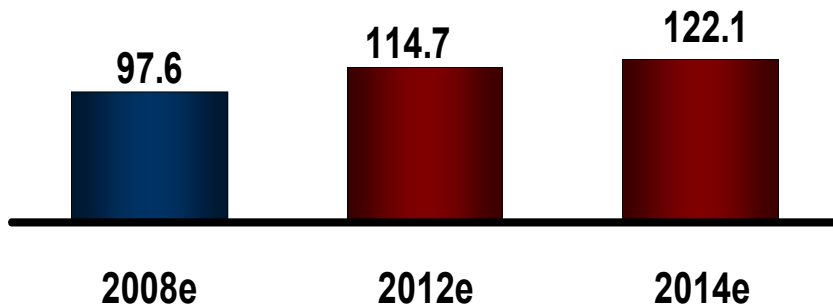
	2009	2010	2011	2012	2013	2014
Nominal tariff increase	1%	5%	5%	5%	4%	3%
Inflation	3%	3%	3%	3%	3%	3%
Real tariff increase	-2%	2%	2%	2%	1%	0%

CO2 assumption: Free allowances in 2013 and 2014, as in 2012

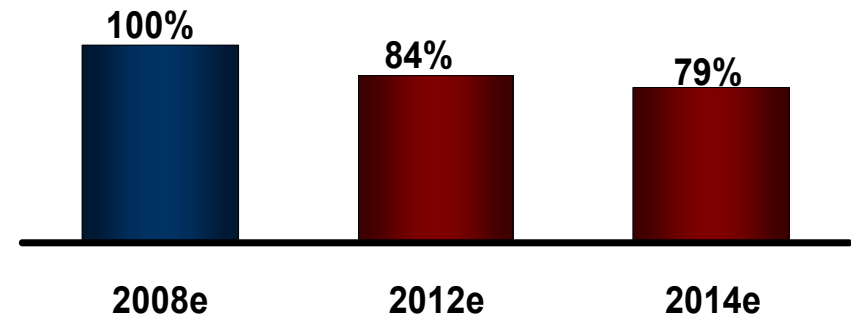


Tariff increases will result in revenue increase of €1.4bn

Average revenue in nominal terms
(€/ MWh)



PPC share in retail market
(interconnected) (%)



CO2 assumption: Free allowances in 2013 and 2014, as in 2012



Tariff increase, cost reduction as well as internal and external funding enable PPC to robustly finance the investment program

Uses and sources of funds (in €bn)

Uses of funds

Sources of funds

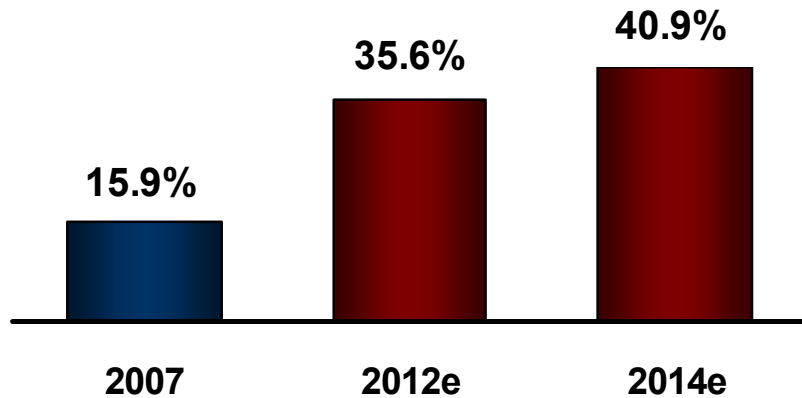
	15.5	15.5	
		0.9	Net income from business as usual
		1.4	Revenue increase
		2.2	Controllable Cost reduction
		1.8	New connection charges
		4.5	Additional debt
New investments PPC	10.7		
		4.7	Depreciation
New investments subsidiaries	2.8		
Dividend payments	1.6		
Cash and other assets	0.4		

CO2 assumption: Free allowances in 2013 and 2014, as in 2012

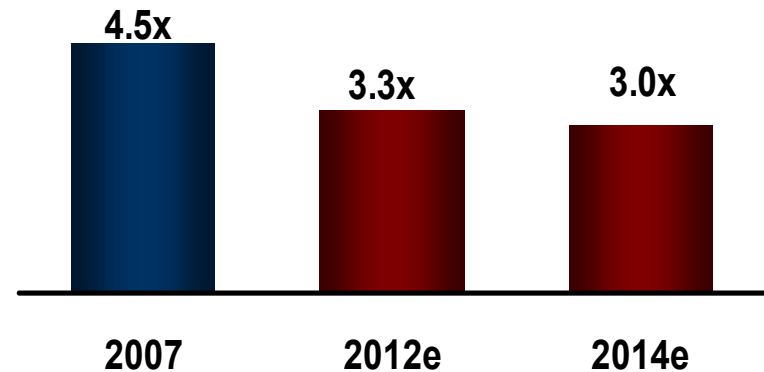


With implementation of Business Plan all financial indices present a positive trend

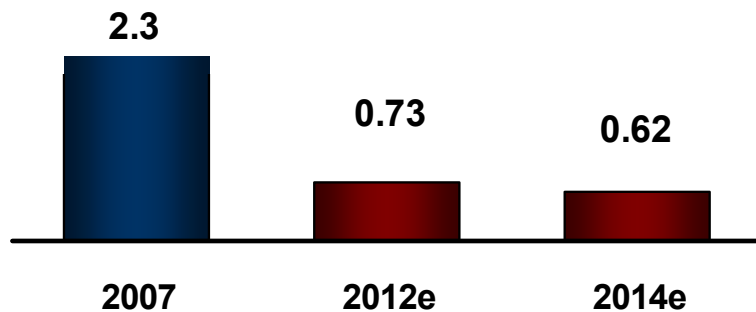
EBITDA margin (%)



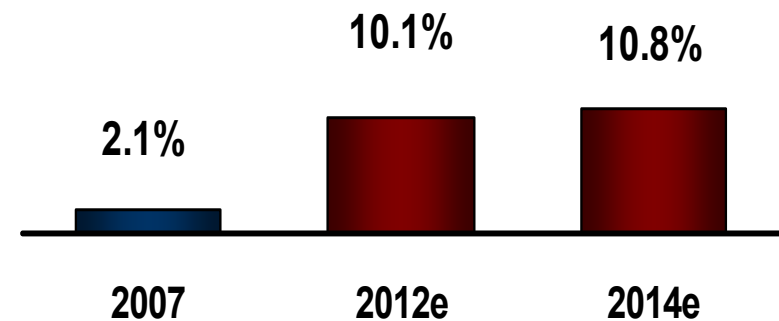
Net Debt / EBITDA



Efficiency ratio (controllable OPEX/ EBITDA)



ROCE 2007-2014e (%)

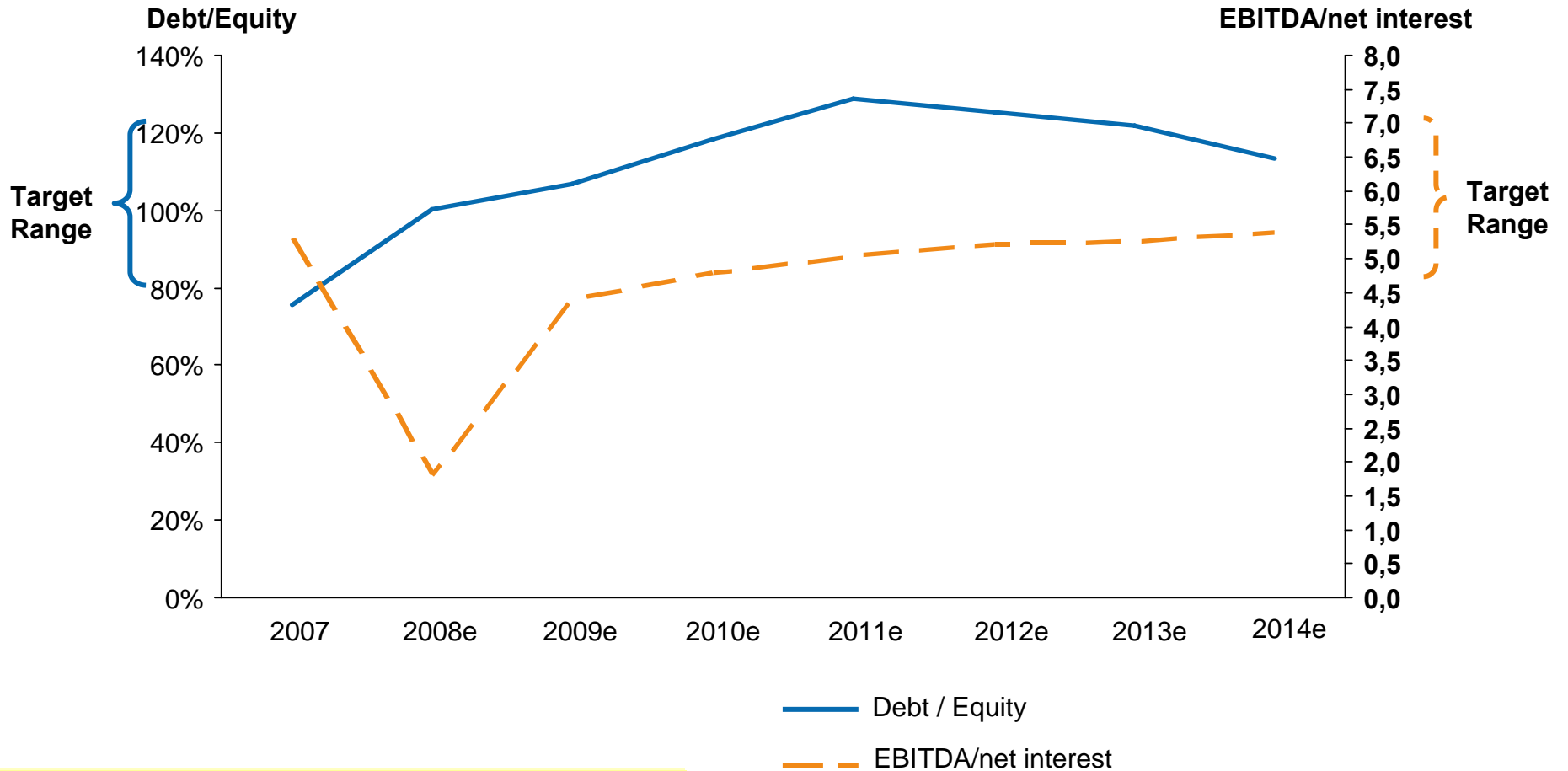


CO2 assumption: Free allowances in 2013 and 2014, as in 2012



Debt and interest coverage ratios within target range

Projection of Debt Ratios for PPC



CO2 assumption: Free allowances in 2013 and 2014, as in 2012



Alternative assumption : no free CO2 allowances post 2012

Investments

Revised
investment
plan
€13.5 bn.

Expenses

Reduction in
controllable costs in
the areas of:
-Personnel
-Materials
-External Services

Revenues

Required
revenue
increase to
support
investment
plan

CO2 alternative assumption: No free CO2 allowances in 2013 and 2014



If there are no free CO2 allowances post 2012, PPC will be impacted by an annual expenditure of c.€1.4bn

CO2 Economics

	2013	2014
CO2 Costs (EUR)	1,379,000,000	1,360,000,000
Total impact on average tariff (€/ MWh)	26	26
Proposed increase in average tariff (€/ MWh)	10.8 (42%)	4.1 (14.9; 54%)
Resulting additional revenues*	503,000,000	662,000,000

Note: CO2 price assumption post 2012 €28/tn

* After supply market share losses

CO2 alternative assumption: No free allowances in 2013 and 2014



With additional CO2 costs, PPC would propose tariff increases by a total of 17% above inflation over the six year period

Proposed tariff increases if no free allowances in 2013 and 2014 (%)

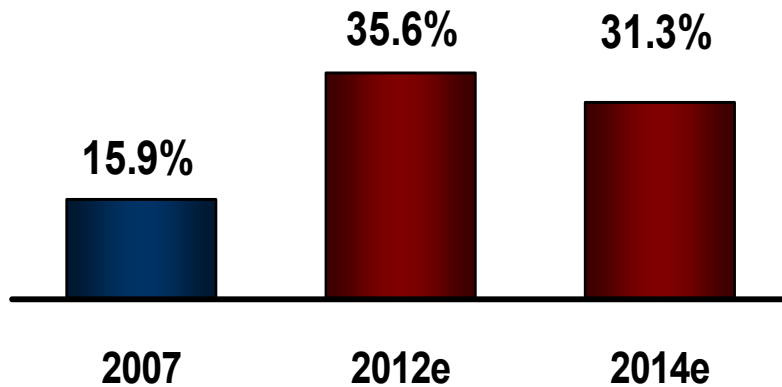
	2009	2010	2011	2012	2013	2014
Nominal tariff increase	1%	5%	5%	5%	13%	6%
Inflation	3%	3%	3%	3%	3%	3%
Real tariff increase	-2%	2%	2%	2%	10%	3%

CO2 alternative assumption: No free allowances in 2013 and 2014

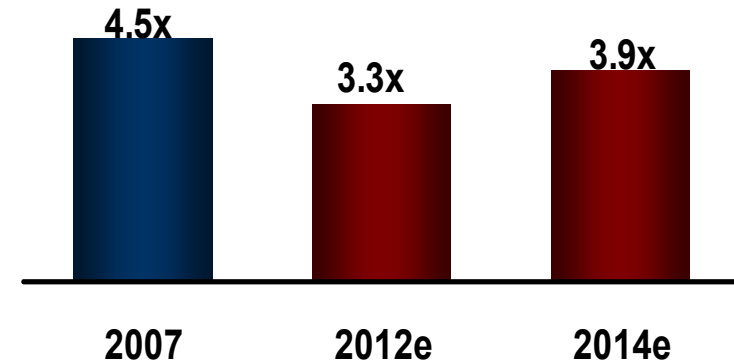


With additional CO2 costs, PPC will achieve a 31.3% EBITDA margin and a 3.9x Net Debt / EBITDA in 2014

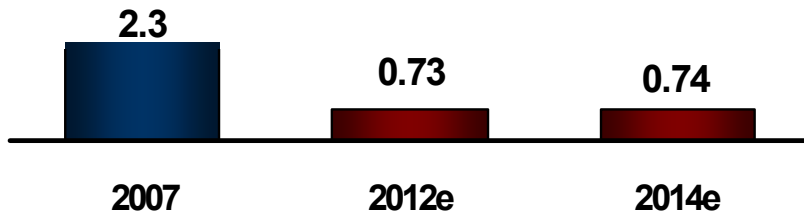
EBITDA margin (%)



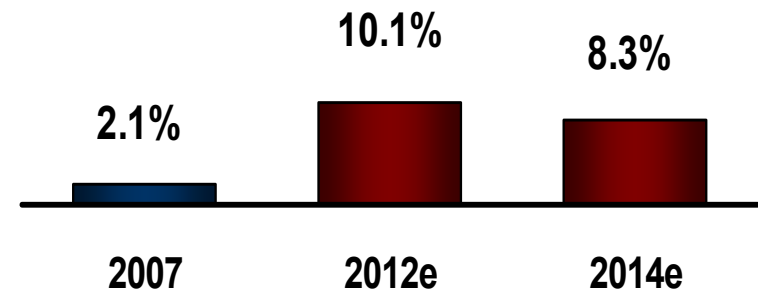
Net Debt / EBITDA



Efficiency ratio (controllable OPEX/ EBITDA)



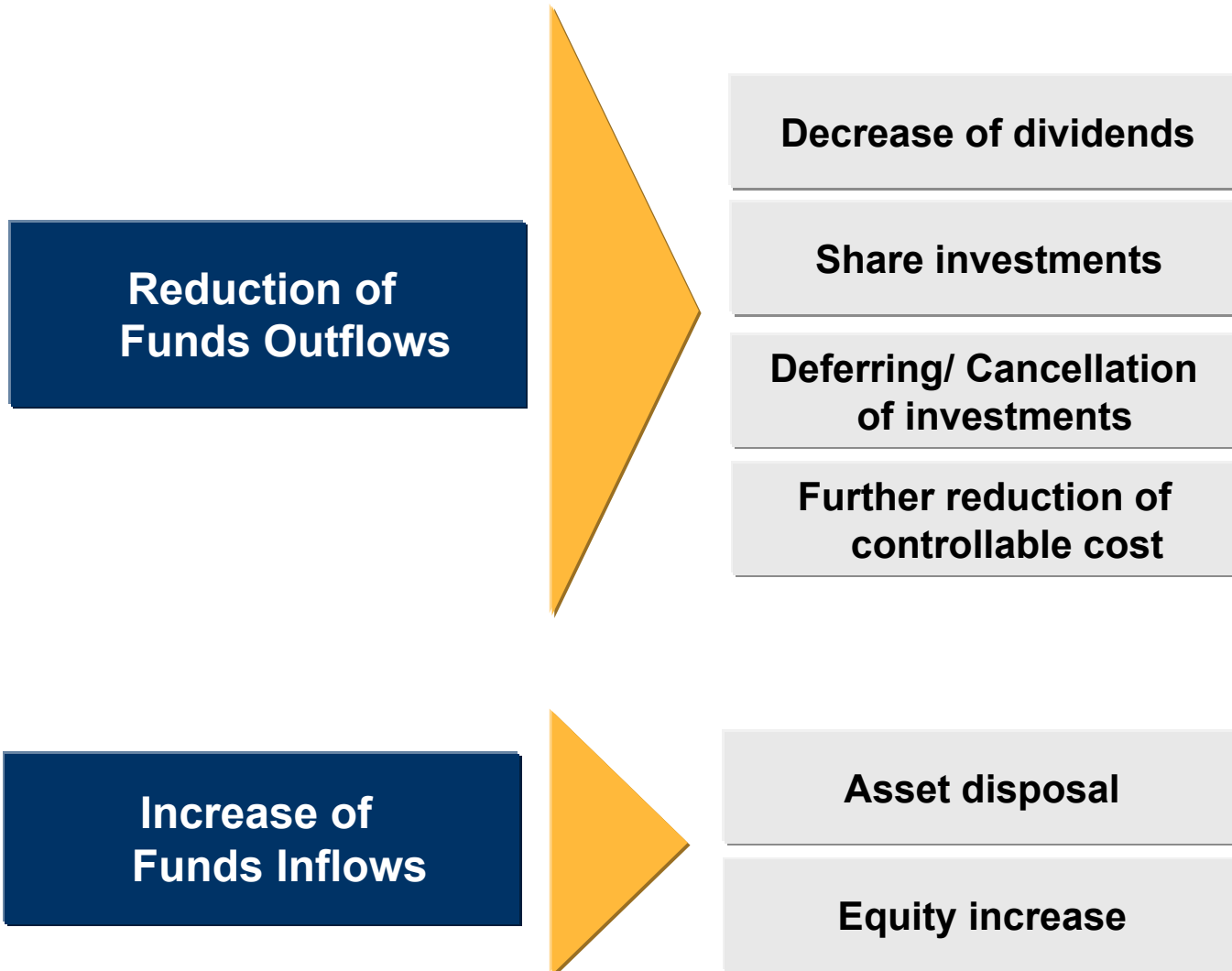
ROCE 2007-2014e (%)



CO2 alternative assumption: No free allowances in 2013 and 2014

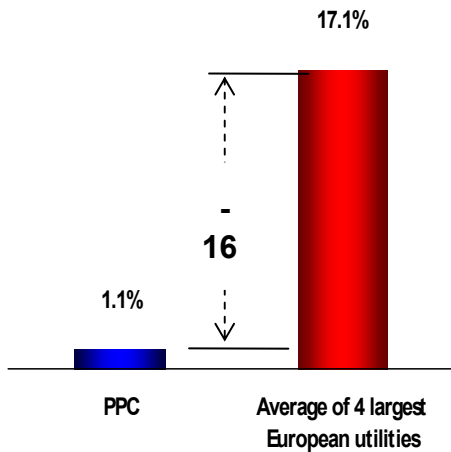


If the proposed by PPC tariff increases are not realised, alternative options will have to be examined





The Business Plan balances in a satisfactory way the expectations of the customers and employees, and creates shareholders' value

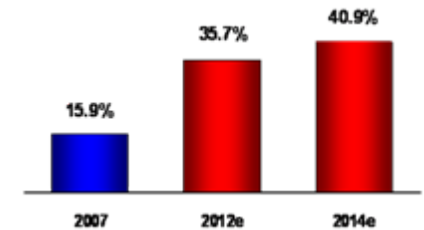
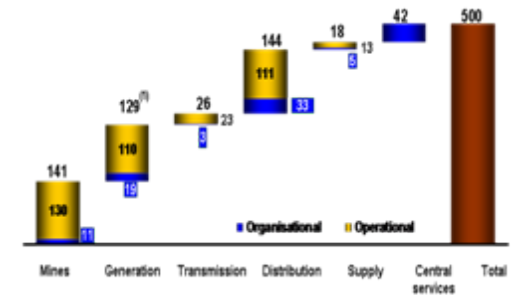


Terminate ongoing value destruction.

Build up generation capability

Decrease in operational expenses

Revenue Increase





Thank you



Appendix



Business Plan Assumptions

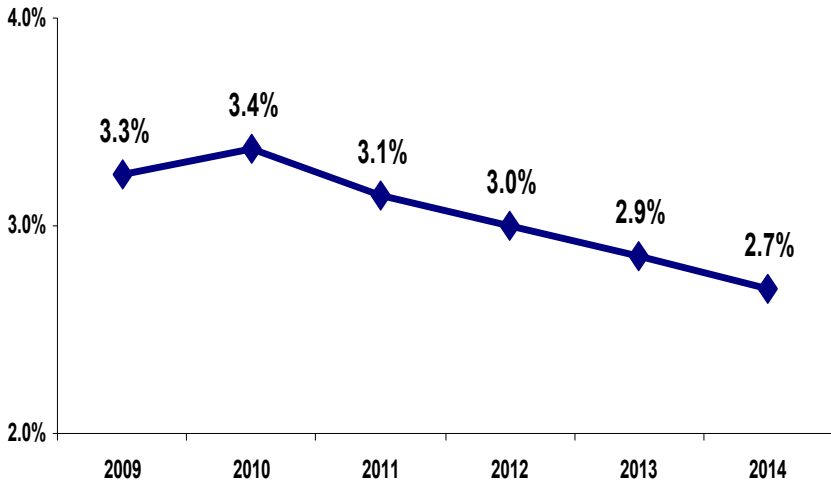
Parameters	Value
Brent	65 USD / bbl
USD/EUR	1.25 USD / EUR
Price of hard coal	90 USD / t
Cost of CO₂	NAP II 20 -23 €/t NAP III 28 €/t
Free allocated CO2 rights for 2009- 2011	44.3Mio. t p.a.
Free allocated CO2 rights for 2012	42.6Mio. t p.a.
Consumer Price Index	3.2% in 2009 2.9% from 2010
Producer Price Index	4%



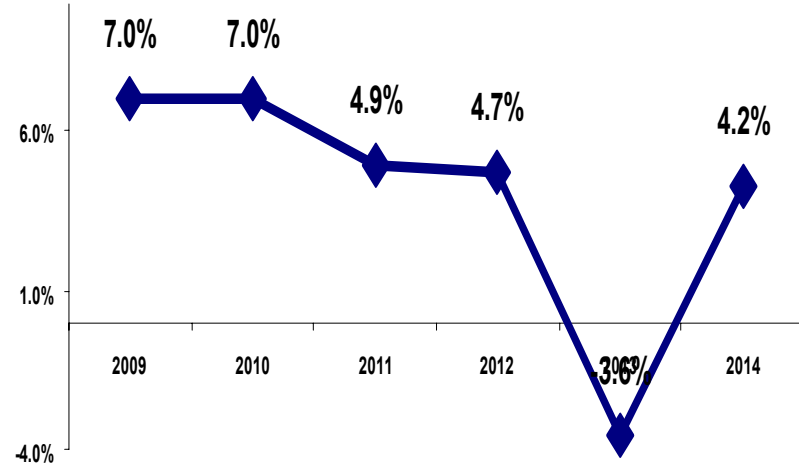
Evolution of electricity demand in Greece

Annual demand growth (GWh) (%)

Interconnected



Islands



Source: HTSO PPC

Note: interconnection of Cyclades in 2012